
Ertai's Study of Lesser Wizards

Quarterly Report Q1

Temporal Inept

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Funded by the Friends of Ertai Society

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1 Introduction

Ertai's first Quarterly Report is meant to supplement "Ertai's Study of Lesser Wizards" with updates to cards and decks which follows the release of Ravnica Allegiance and others since August 2018¹. The Quarterly Report serves to provide a quantitative update after the release of the last set and as such provides no analysis².

1.1 Data

The cEDH decks, selected in this survey, were taken from Average Dragon's Conglomerate³, the decklists were scraped from TappedOut⁴ and deckstats⁵ and are current as of 23 March 2019. Card information was retrieved from Cockatrice's⁶ card database.

¹ESOLW was published in January 2019 but used only data compiled from before August 2018

²I have dropped the Archetype analysis as it currently undergoing a major changes. I hope to have this completed the release of ESOLW v2.

³<https://docs.google.com/spreadsheets/d/1iAcKkzvW55kbRPzAo-AK1Bs43n5S1jk2RaTYBOoF124>

⁴<https://tappedout.net>

⁵<https://deckstats.net>

⁶<https://cockatrice.github.io>

Full listings of the data compiled for generation of the figures can be found in the Appendix or downloaded from <https://github.com/TemporalInept/ESoLW>.

1.2 Contact

I can be contacted via a variety of methods:

- Email: TemporalAdept@Mail.com
- Discord: DM to TemporalInept#1413
- Reddit: PM to Temporal_Inept
- TappedOut: https://tappedout.net/users/Temporal_Inept

Feel free to contact me regarding any desired additions, with corrections or hate mail if that is your thing.

1.3 Future Considerations

The current intent is to publish a quarterly following the release of major sets. So far, I have ignored Lands and have not written any code to parse them. I hope to have it completed by the next quarter in order to quantify additional factors of Lands.

1.4 Remainder of Paper

The remainder of this paper covers Cards in Section 2, Decks in 3 and deck listings in Section 4. Listings of full tables can be found in Appendix A.

2 Cards

As of the release of Ravnica Allegiance, there are 18452 legal cards in the multiverse with. The 59 surveyed cEDH decks used 860 unique cards⁷.

Table 1: Multiverse to cEDH types

	Land	Creature	Artifact	Enchantment	Instant	Planeswalker	Sorcery
MTG	638	9881	1831	2298	2287	150	2062
cEDH	127	307	133	70	144	6	116
Per.	0.20	0.03	0.07	0.03	0.06	0.04	0.06

Table 2: Multiverse to cEDH colors

	White	Blue	Black	Green	Red	Colorless	Gold
MTG	3106	2930	2934	2781	2866	1932	1903
cEDH	71	194	112	159	78	180	66
Per.	0.02	0.07	0.04	0.06	0.03	0.09	0.03

⁷A complete listing (Card-histogram-alphabetically.tsv) of all cards can be downloaded from <https://github.com/TemporalInept/ESoLW>

2.1 By Color Identity

In this section, cards are broken down by color identity to include colorless and Gold. Each section shows the top 20 cards in the respective color, CMC histogram for all cards in that color and the card type histogram for all cards in that color.

2.1.1 White Cards

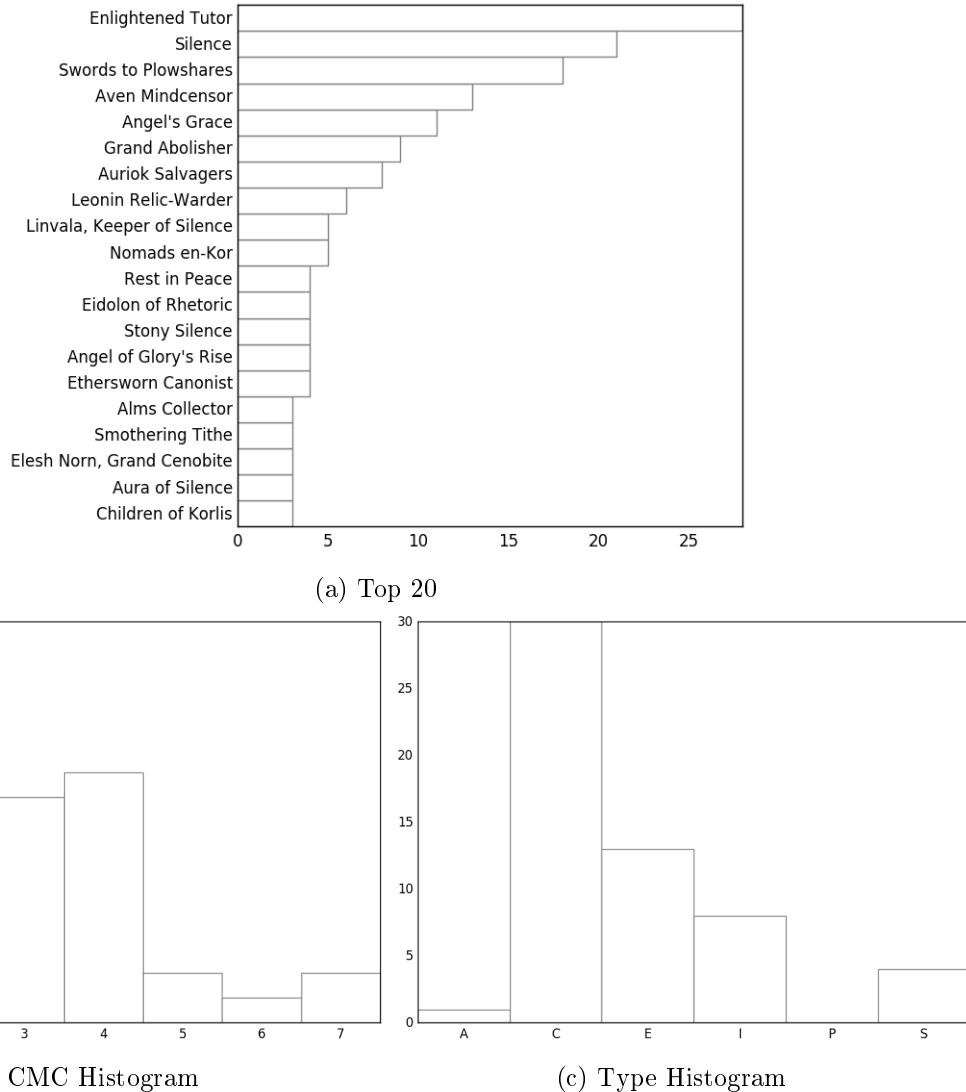


Figure 1: White Cards

2.1.2 Black Cards

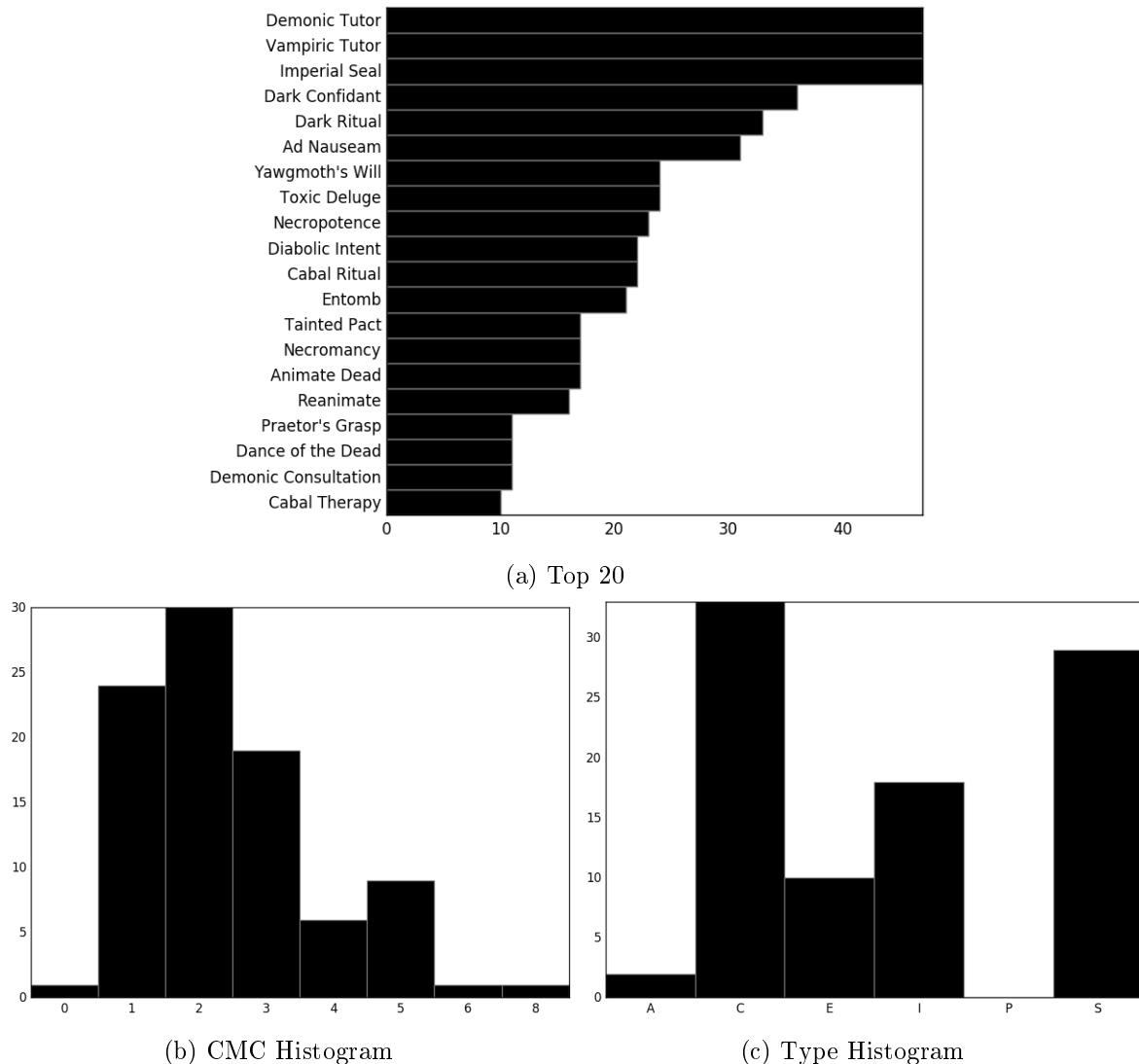
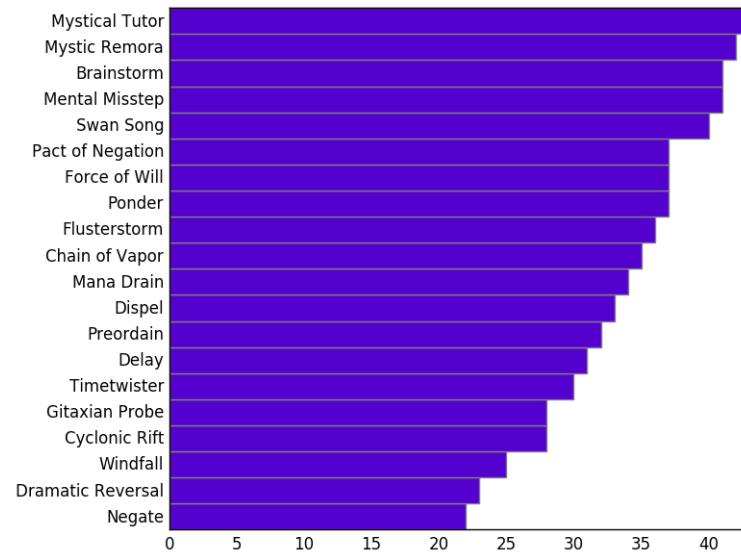
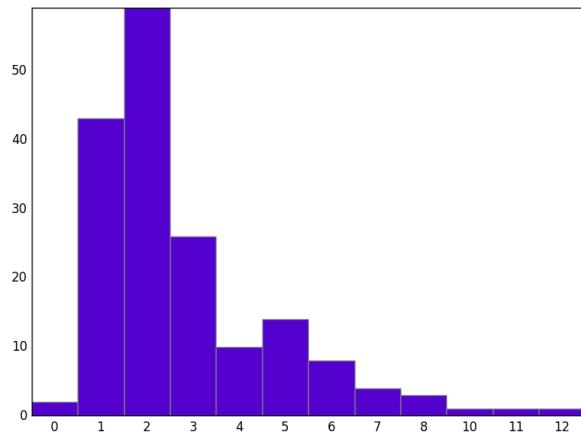


Figure 2: Black Cards

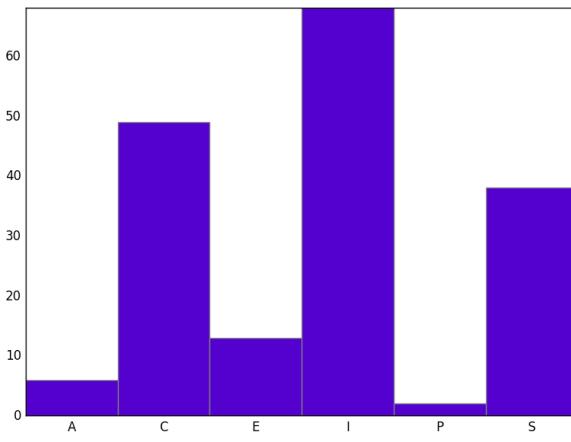
2.1.3 Blue Cards



(a) Top 20



(b) CMC Histogram



(c) Type Histogram

Figure 3: Blue Cards

2.1.4 Green Cards

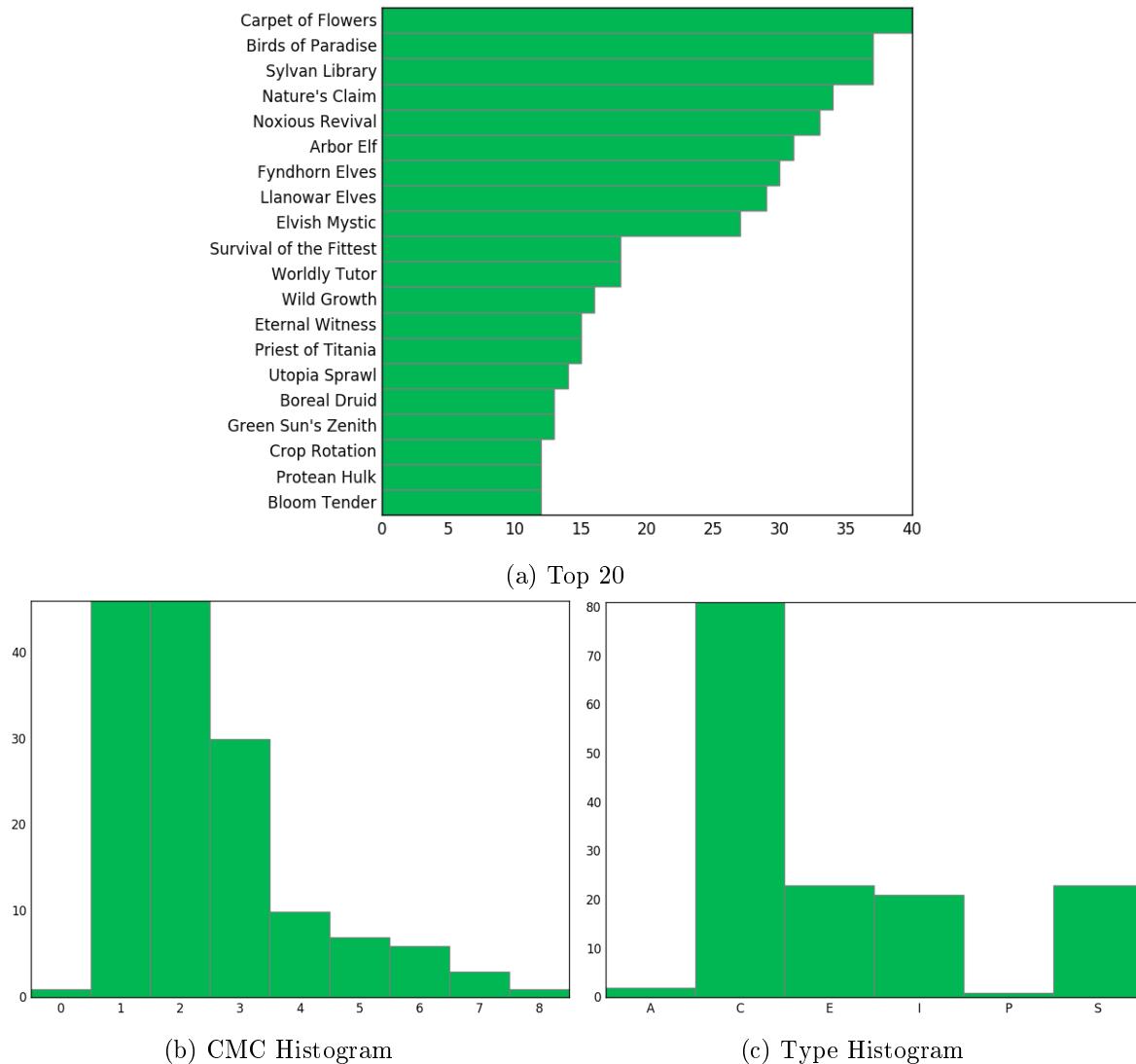


Figure 4: Green Cards

2.1.5 Red Cards

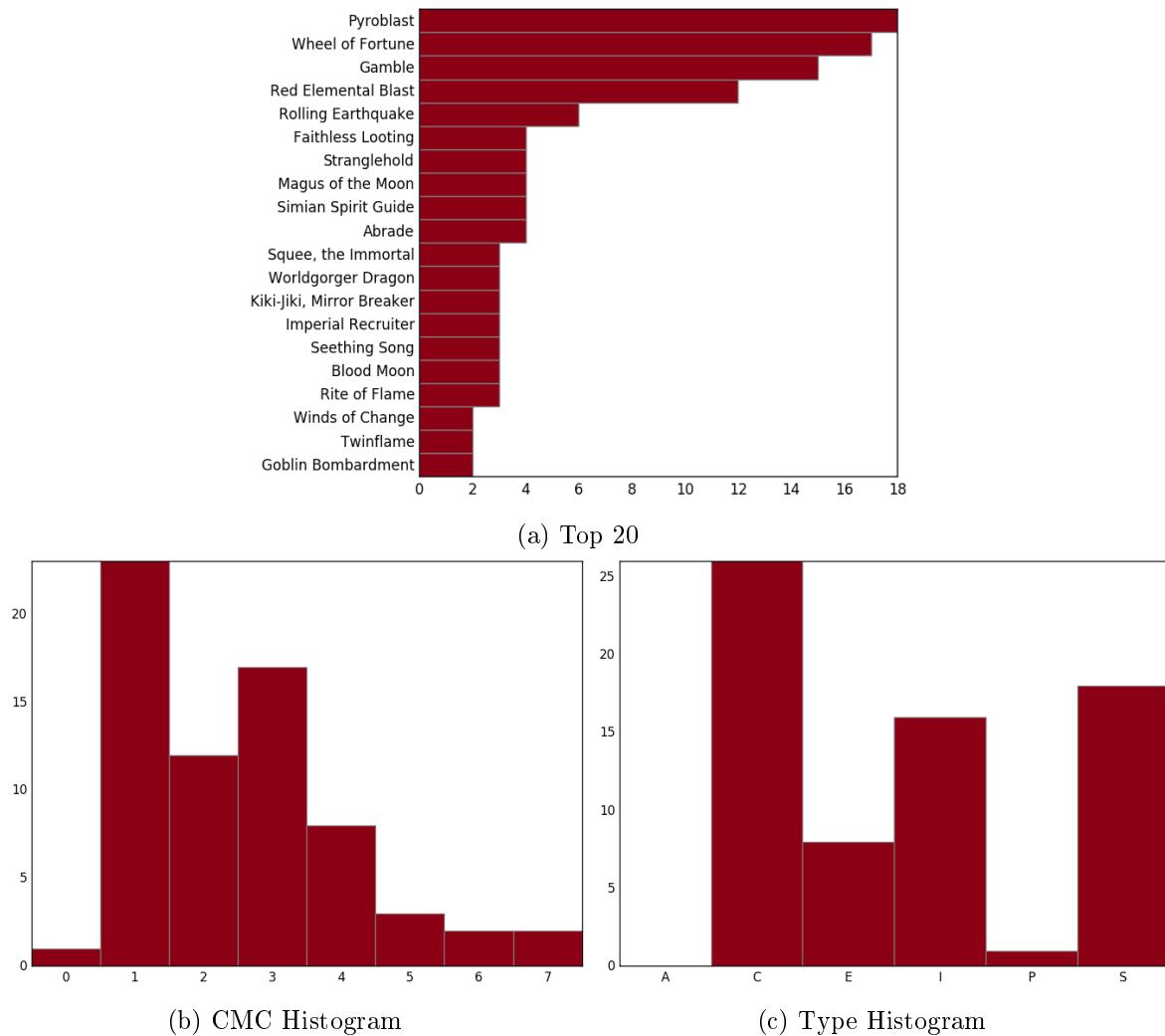


Figure 5: Red Cards

2.1.6 Colorless Cards

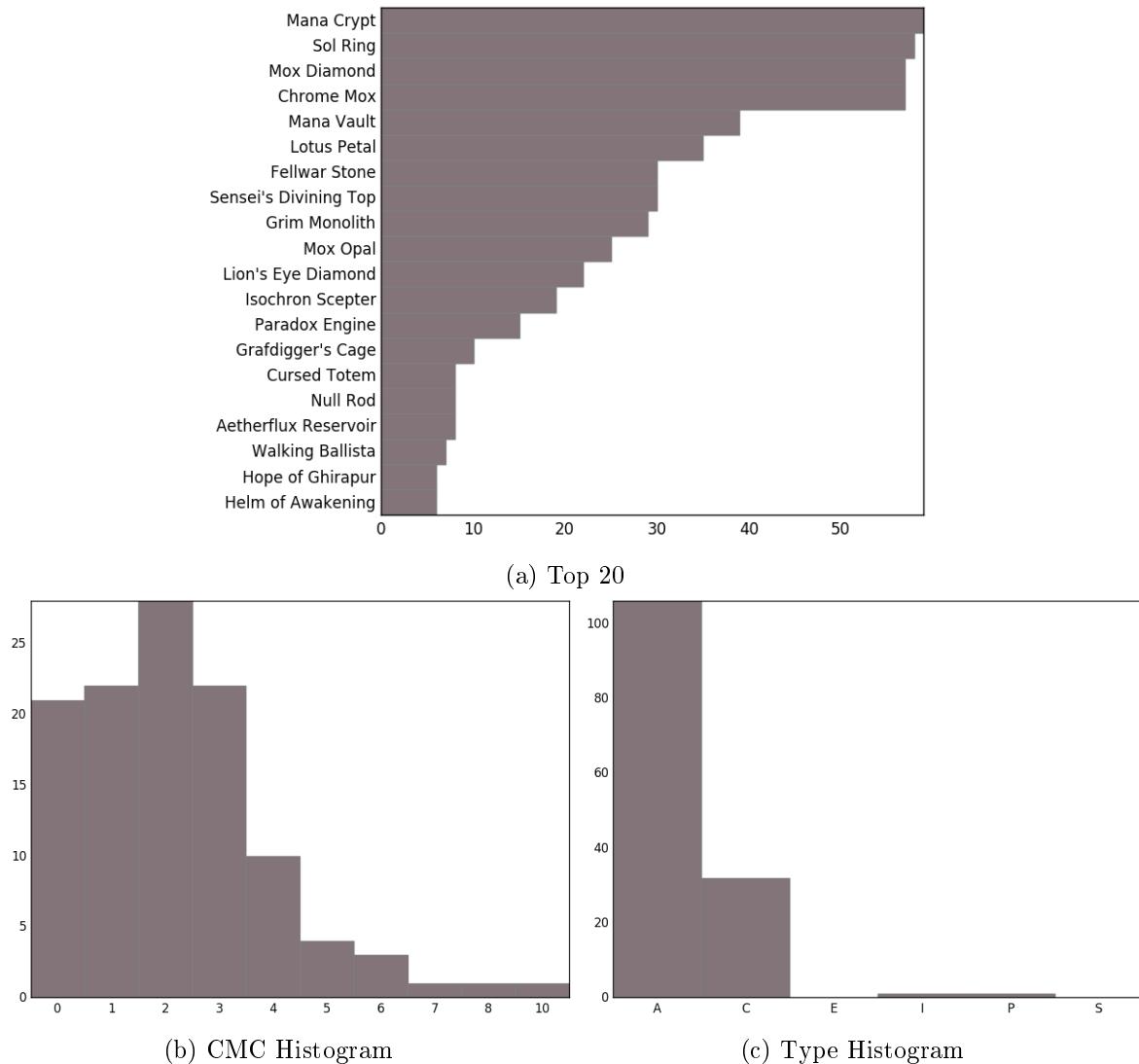


Figure 6: Colorless Cards

2.1.7 Gold Cards

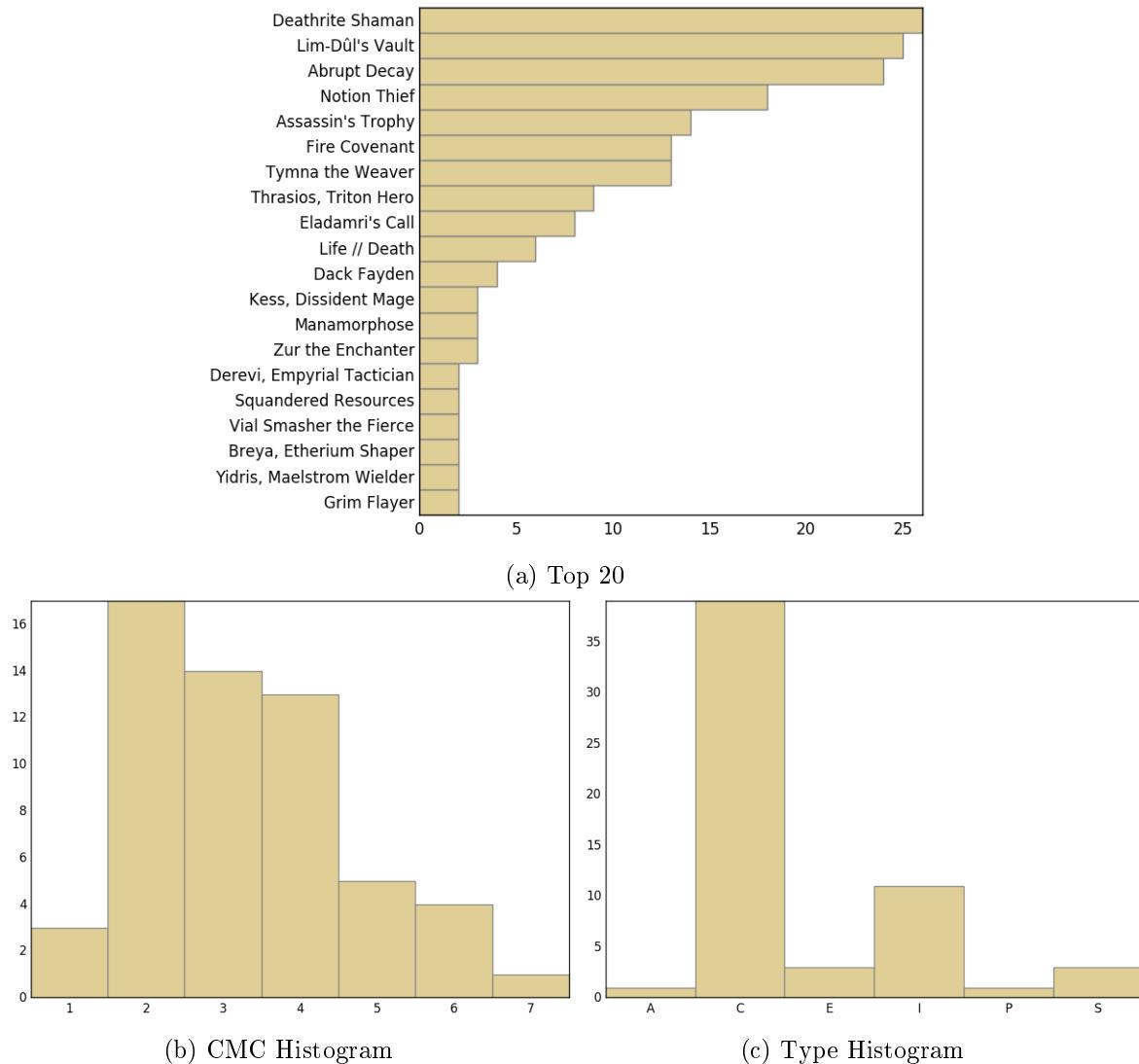


Figure 7: Gold Cards

2.2 By Type

This section breaks down cards by type showing the top 20 of each type and where applicable, histograms of types by color, CMC and alternate/reduced CMC (See Section 2.3 for a description of how this is calculated).

2.2.1 Lands

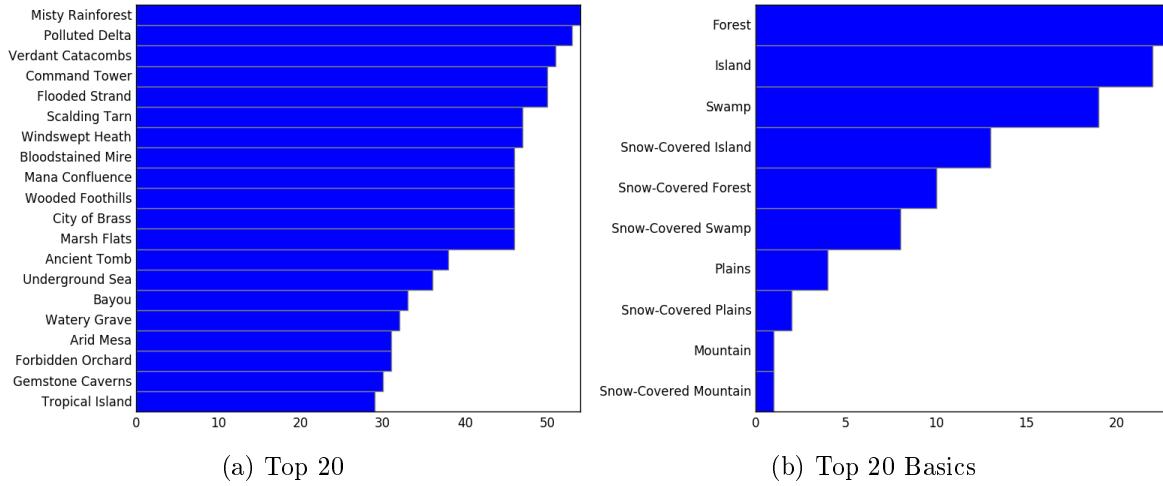


Figure 8: Lands

2.2.2 Creatures

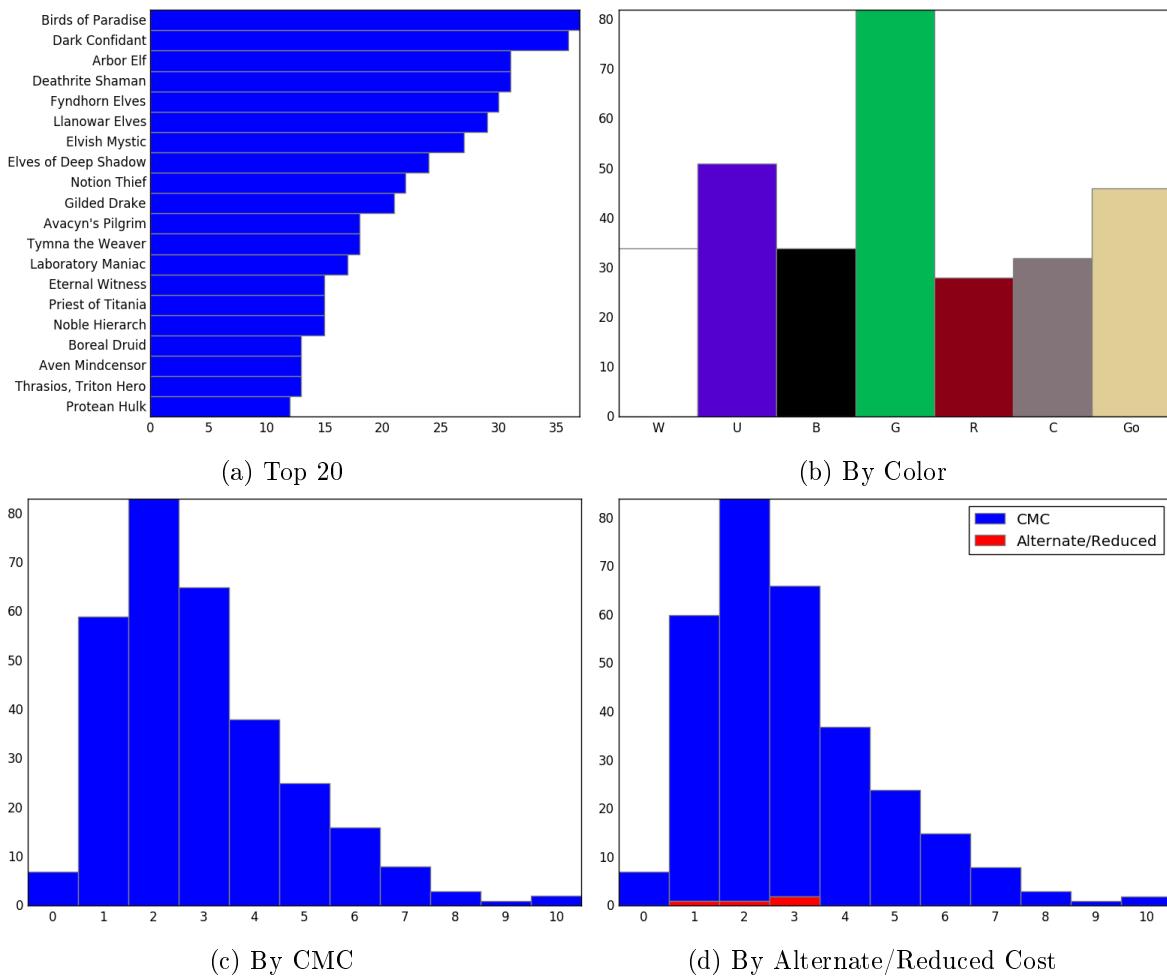


Figure 9: Creatures

2.2.3 Artifacts

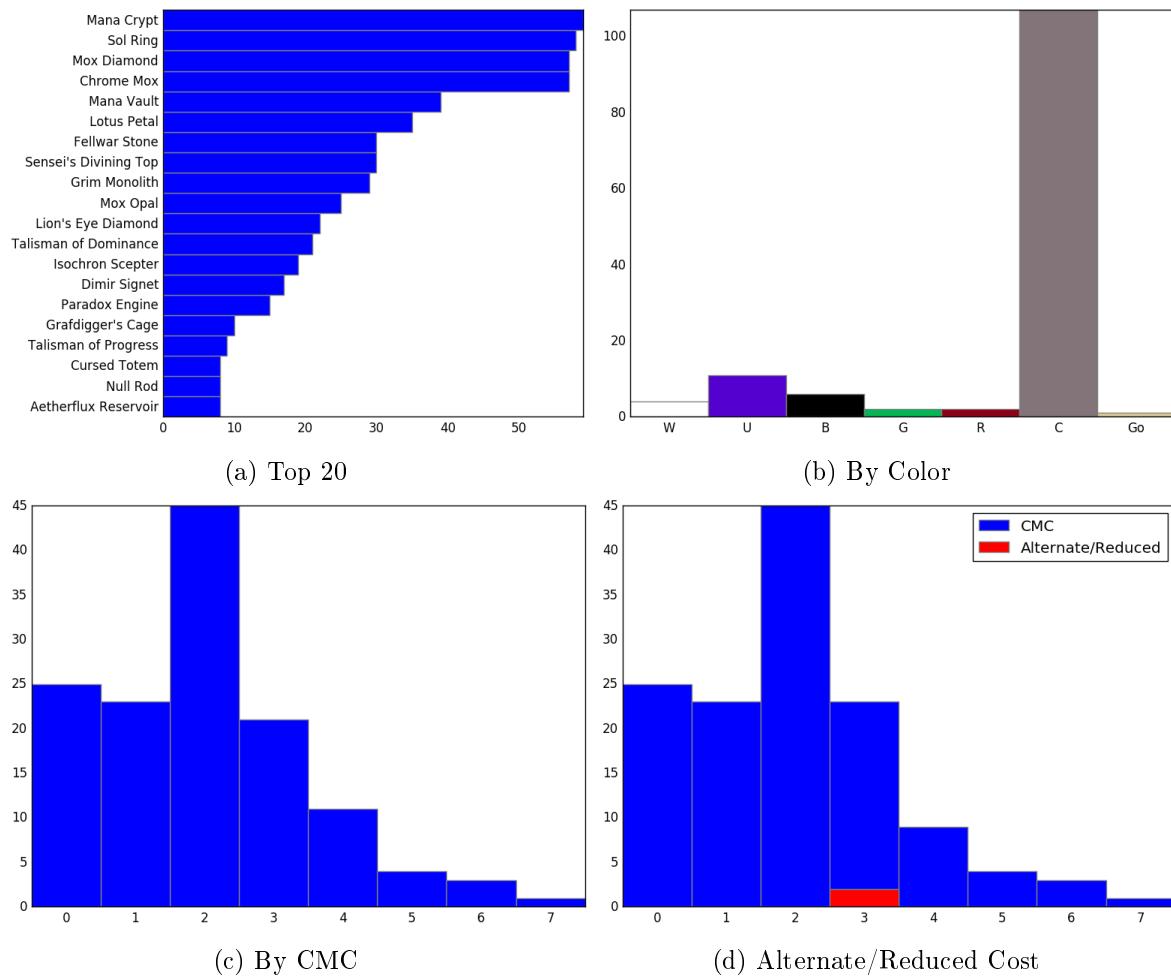


Figure 10: Artifacts

2.2.4 Enchantments

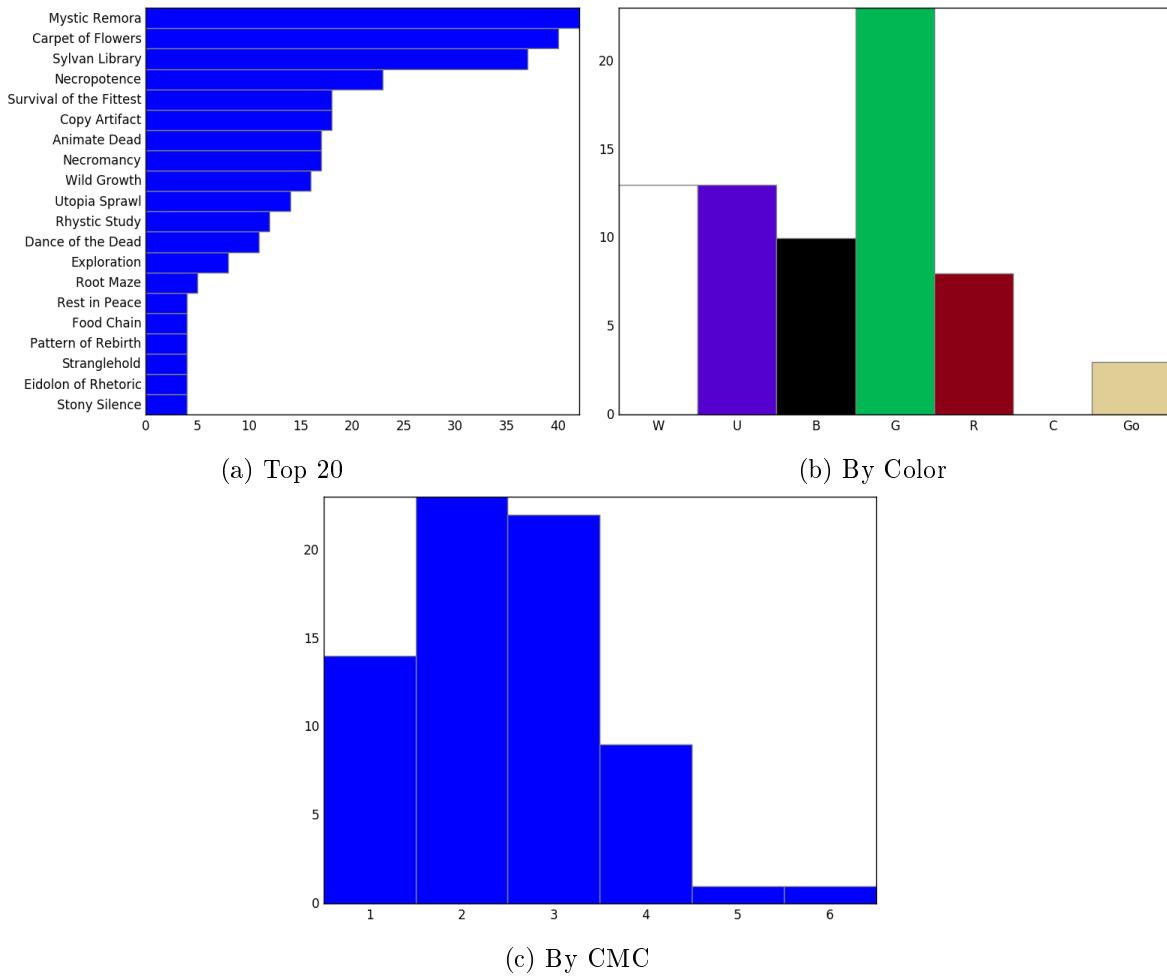


Figure 11: Enchantments

2.2.5 Instants

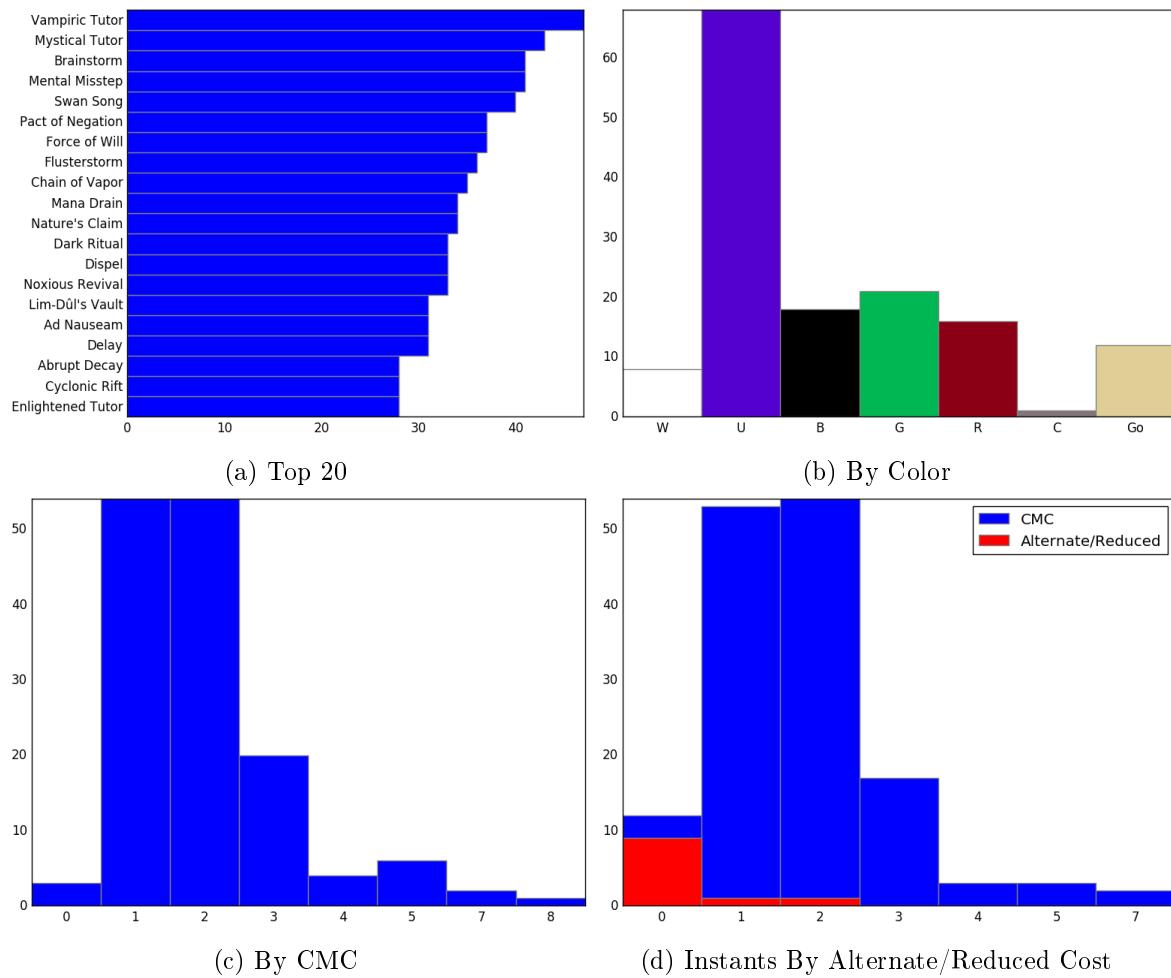


Figure 12: Instants

2.2.6 Planeswalkers

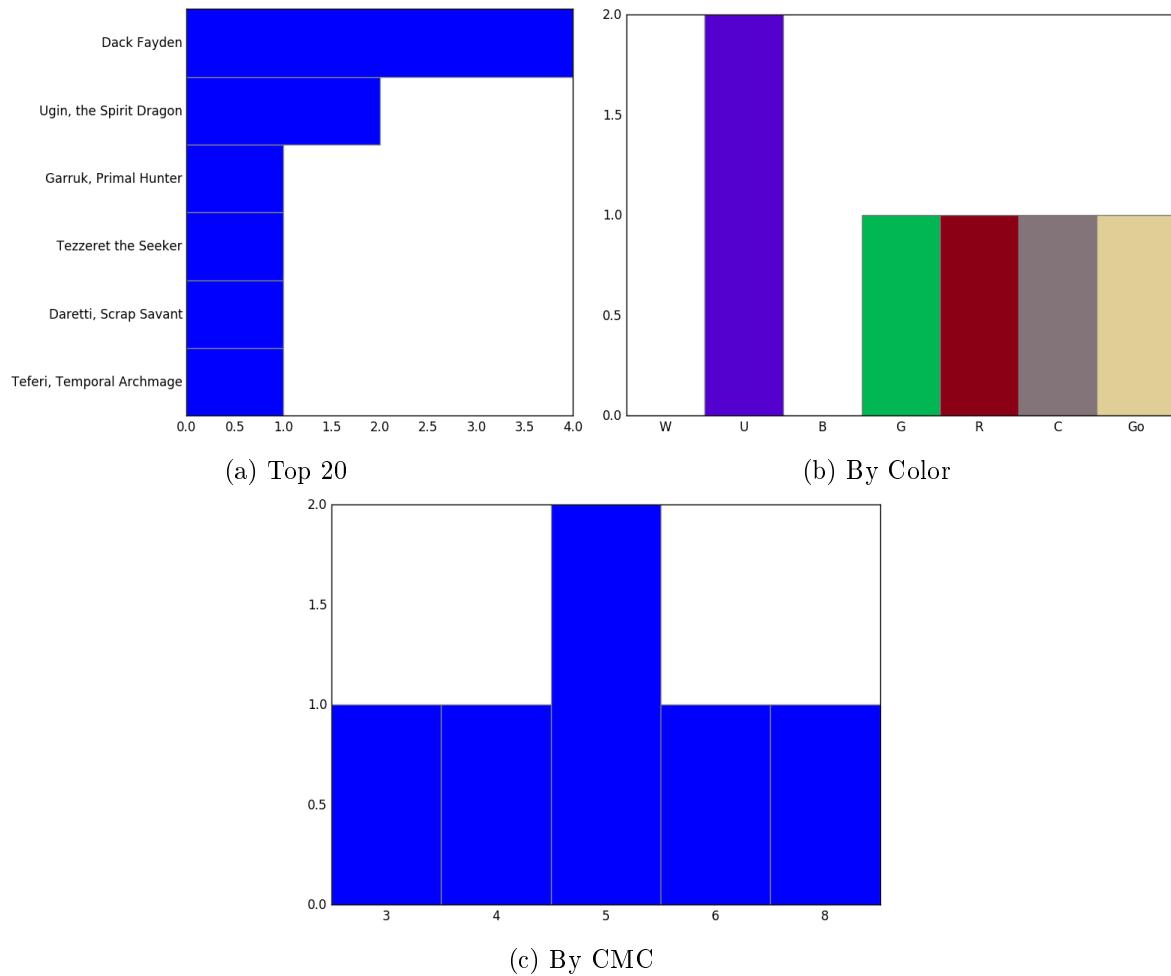


Figure 13: Planeswalkers

2.2.7 Sorceries

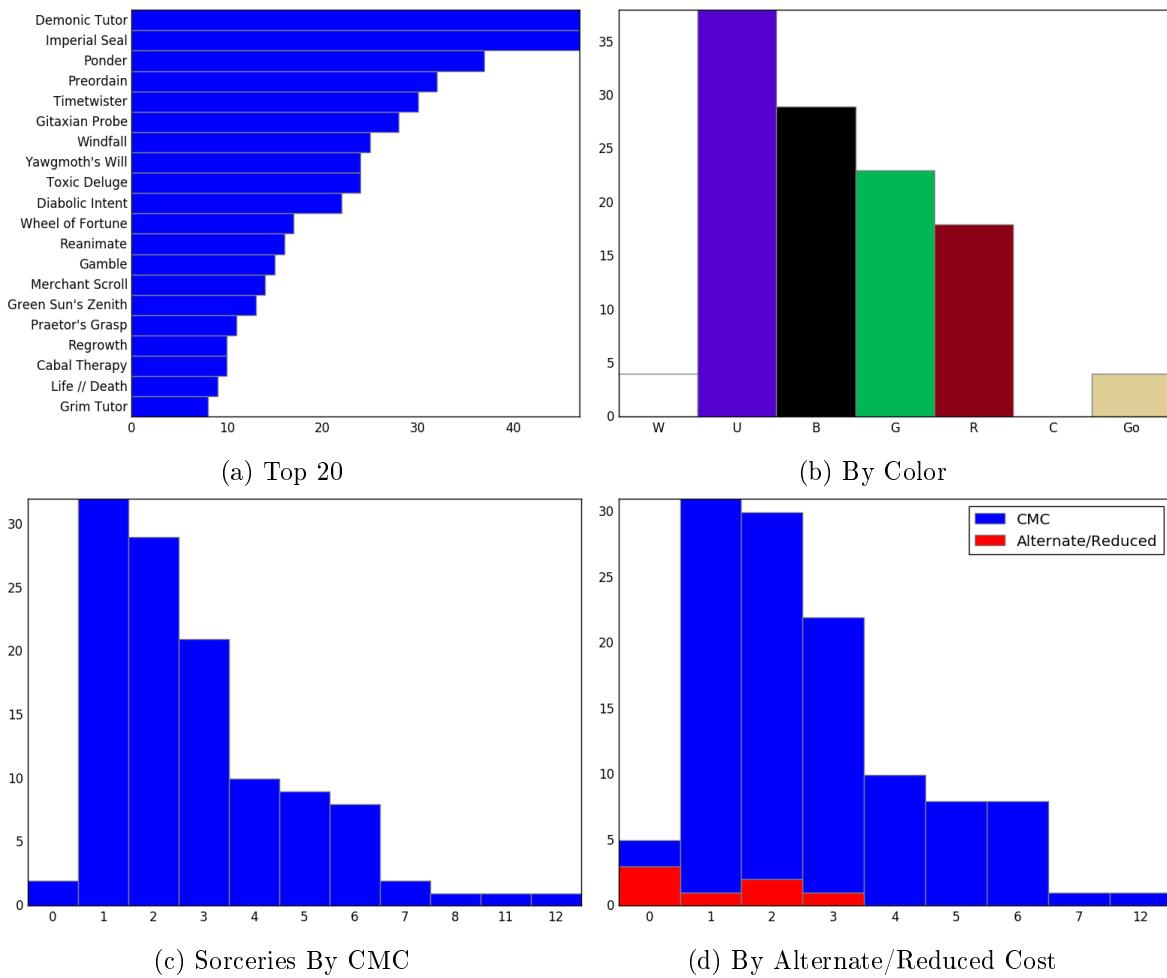


Figure 14: Sorceries

2.3 Alternate and Reduced Casting Cost

This section covers alternate and reduced casting costs. Alternate casting costs have been calculated by finding cards with either Phyrexian Mana or contain the phrase "rather than pay(ing) (its|this spell's) mana cost". Reduced casting costs have been calculated by finding any keyword or ability word that reduces the cost i.e. Madness or Improvise. In all cases, (except Emerge, Offering) the max allowable reduction is assumed. For example, consider the Keyword Improvise: The reduced casting cost of Barricade Breaker is 0 and the reduced casting cost of Bastion Inventor is U because it is assumed that the caster has enough artifacts to tap for the amount of colorless mana. Currently, we are not considering cards which untap lands upon casting or ETB.

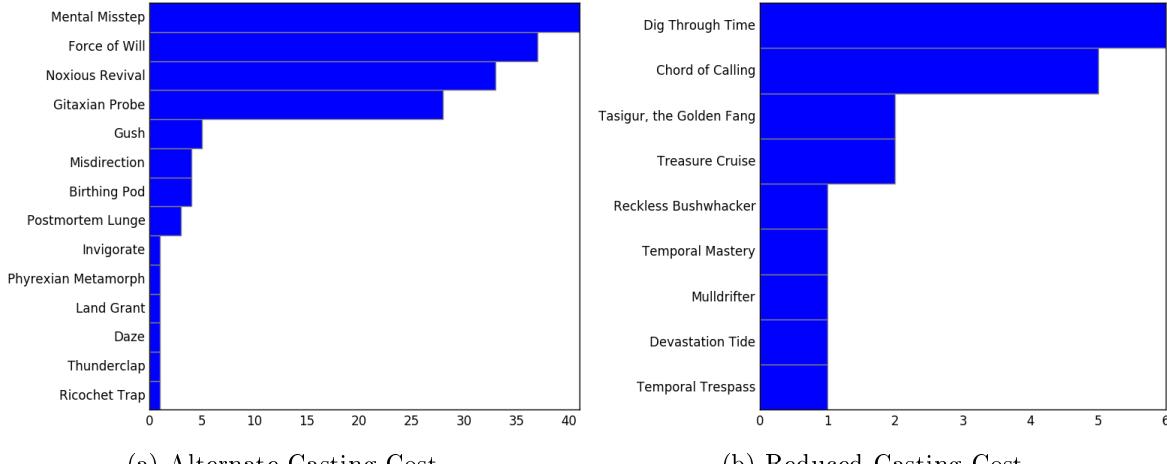


Figure 15: Alternate and Reduced Casting Costs

2.4 Multiple Mana

This section covers cards with multiple mana symbols in the casting cost.

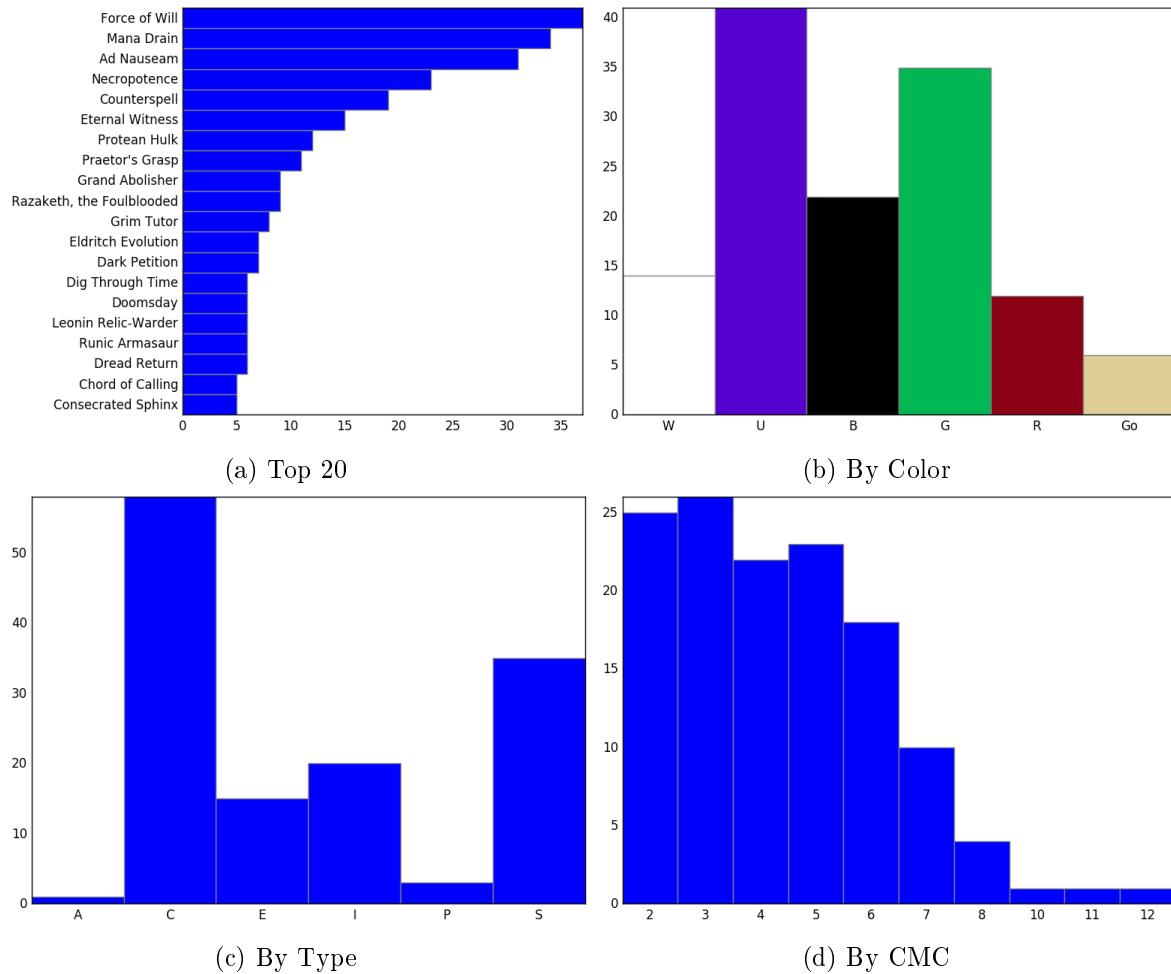


Figure 16: Multiple Mana

2.5 Keywords and Ability Words

This section provides a look at the ability words and keywords present in cEDH cards.

NOTE: The Figures below are sorted by the unique count of the Keyword (or Ability Word). That is, duplicate occurrences of cards are not counted. The Tables in Appendix A.5 show both the unique count and the total count and the online version also includes the names of the cards for each Keyword (or Ability Word).

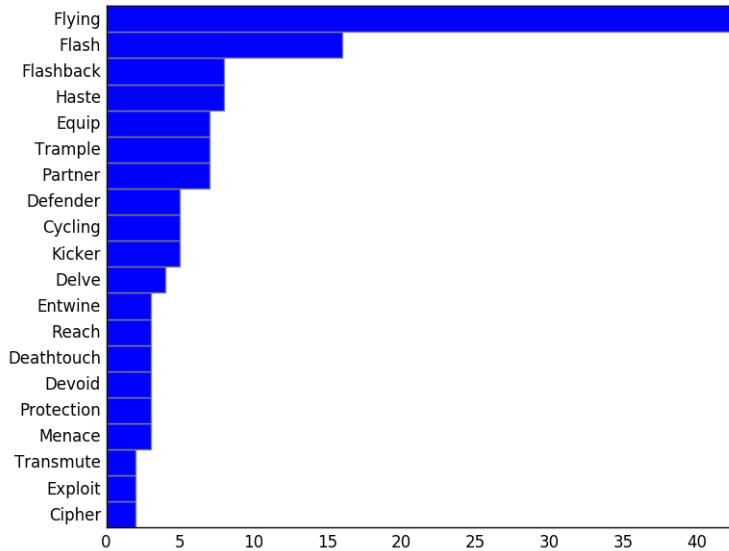


Figure 17: Top 20 Keywords

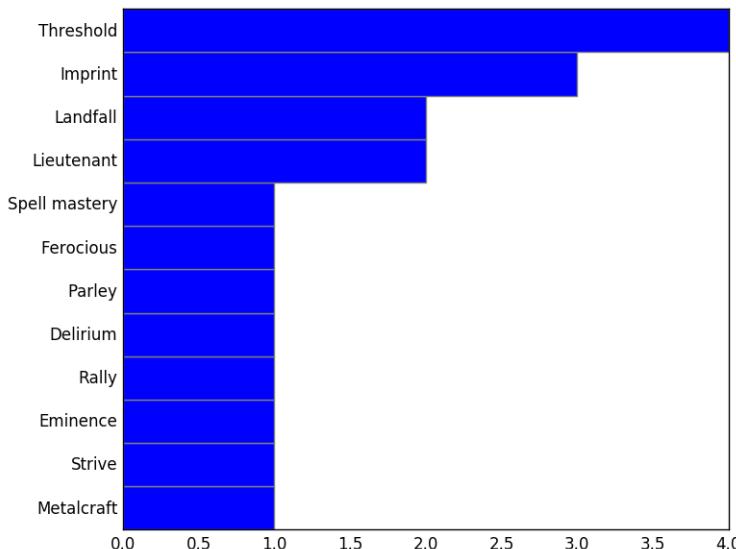


Figure 18: All Ability Words

2.6 ETBs and Triggered Abilities

This section provides a look at enters the battlefield (ETB) triggers in cEDH cards and non-ETB triggered abilities⁸.

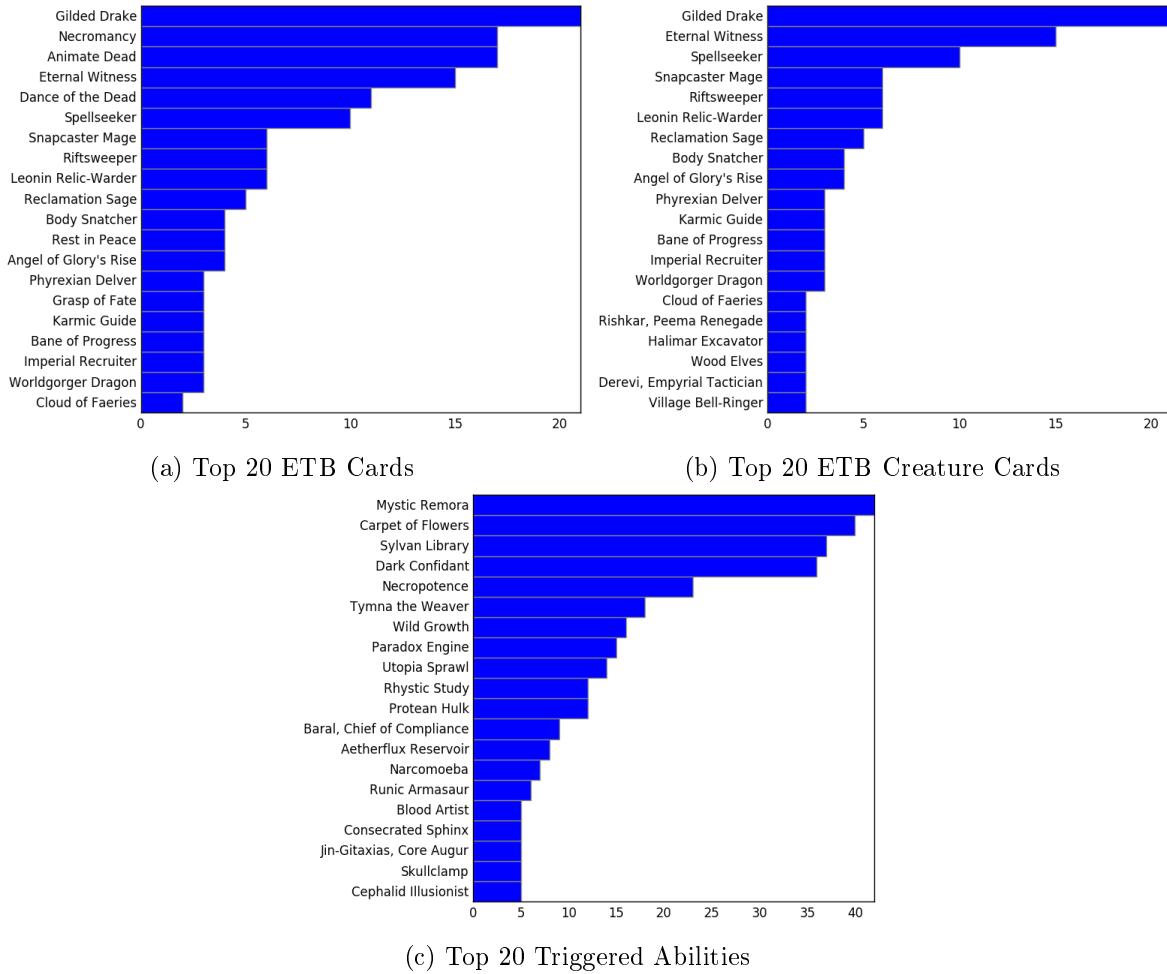


Figure 19: ETB

⁸Several cards that would be considered negative triggers were hard-coded for exclusion. These include cards like City of Brass and Mana Crypt. The full list of exclusions is available in the Appendix.

2.7 Activated Abilities

This section covers Activated Abilities found in cEDH cards. It does not include lands that only tap for mana.

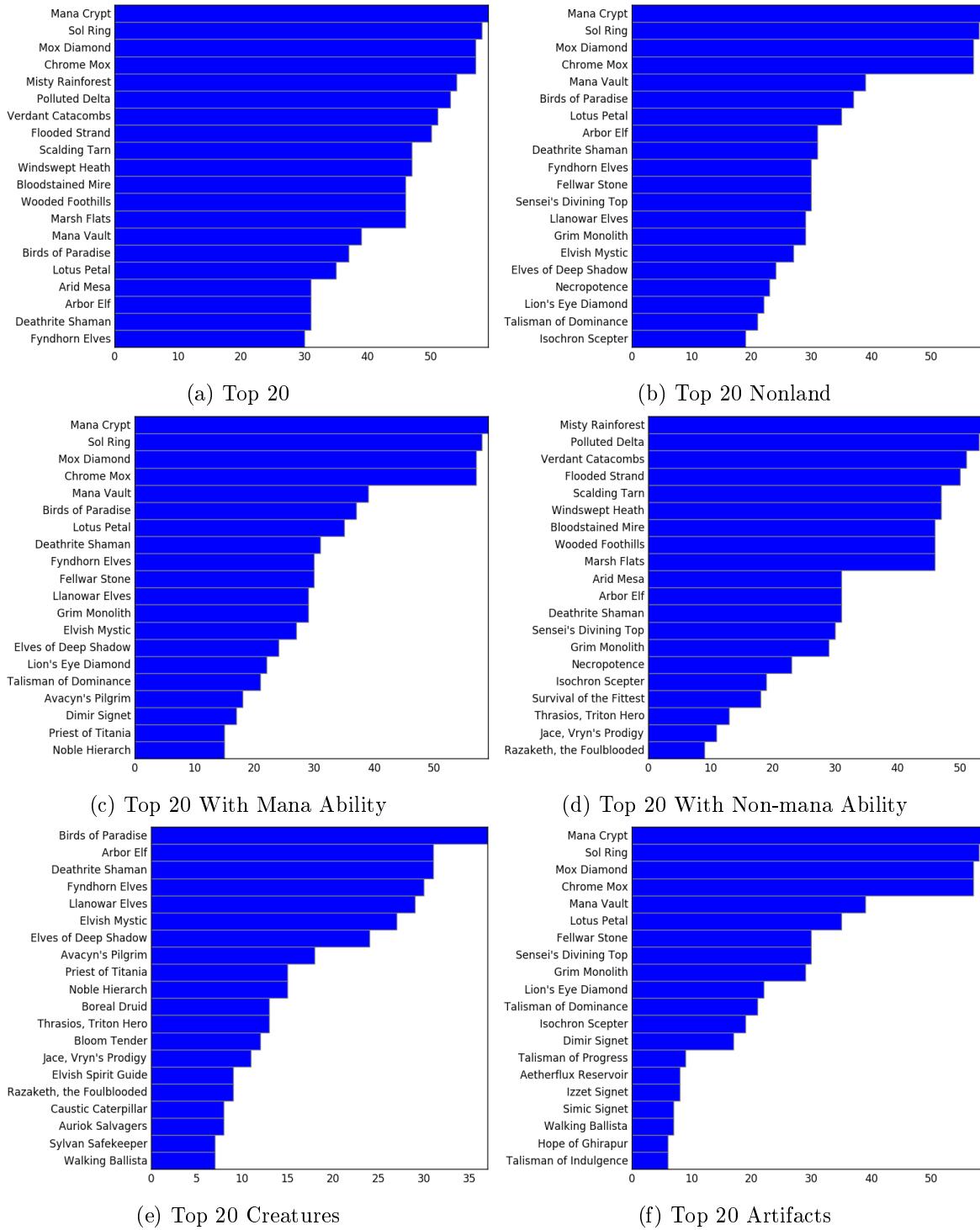


Figure 20: Activated Abilities

3 Decks

A total of 59 cEDH decks were surveyed. See the next Section for deck summaries and listings.

Table 3: Deck stat comparison

	Basic	Nonbasic	Creature	Artifact	Enchantment	Instant	Planeswalker	Sorcery
Low	0	5	2	5	2	6	0	3
High	27	32	43	45	14	36	3	21
Avg	6.24	23.63	17.80	13.66	6.58	22.51	0.17	10.90

Table 4: Side by side deck comparison

Deck	Color	CMC	Lands				Spells			
			B.	N-B	Art.	Cre.	Enc.	Ins.	Pla.	Sor.
4c Lightning Druid	WUBG	1.77	0	29	10	28	6	15	0	13
4c Rashmi	UBRG	1.97	2	28	14	10	9	29	0	8
5c Lightning Druid	WUBRG	1.70	0	29	9	29	8	14	0	12
BUGR Paradox Scepter	UBRG	1.72	2	26	15	7	8	30	0	12
Bad Farm	WBG	1.56	4	25	17	21	9	18	0	10
Baral Control	U	2.19	25	6	17	5	4	33	1	9
Blood Pod	WBRG	2.30	6	27	9	36	12	8	0	4
Breakfast Hulk	WUBG	1.70	0	29	5	22	7	26	0	11
Breya Consultation	WUBR	1.73	2	27	17	7	2	33	0	13
Buried Alive Razaketh Sidisi	B	1.72	21	11	29	13	3	13	0	16
Divergent Control	UBRG	1.94	2	28	17	4	8	28	0	13
Doomsday Breya	WUBR	1.88	0	28	16	9	5	28	1	14
Doomsday Yidris	UBRG	1.88	2	26	17	7	4	28	0	16
Doomsday Zur	WUB	1.82	9	19	16	5	4	33	0	14
E-MAN	WUBG	1.86	2	26	16	12	7	28	0	9
Edric Turns	UG	2.11	9	20	7	33	5	17	0	12
Food Chain Prossh	BRG	1.83	4	24	10	33	7	16	0	9
Food Chain Tazri	WUBRG	1.68	1	27	6	22	5	28	0	11
Gitrog Dredge	BG	1.77	4	32	8	19	8	18	0	11
Godo Helm	R	2.19	19	13	38	9	3	14	1	7
Grixis Consultation	UBR	1.81	3	27	16	5	5	30	0	14
Grixis Twin	UBR	2.18	2	30	11	9	5	24	1	18
HE-MAN	WUBG	1.71	4	24	16	7	9	28	0	12
Harvest Animar	URG	2.10	2	29	8	43	6	11	0	5
High Tide Jace	U	2.28	27	5	14	5	3	31	0	15
Honorbru Meren	BG	2.16	8	24	9	32	11	8	0	9
Hulkweaver	WUBG	1.93	3	27	6	29	11	21	0	5
Jeleva Storm	UBR	2.03	7	21	14	5	4	28	0	21
Kess Storm	UBR	1.93	9	19	16	5	3	28	1	19
Kraum's MANLY Combo	WUBR	1.85	2	27	17	9	5	30	0	10
Mad Farm	WBR	1.56	4	25	19	19	5	16	0	16
Melt Banana	UBRG	1.64	0	28	20	8	5	18	0	21

Table 4: Side by side deck comparison

Deck	Color	CMC	Lands			Spells				
			B.	N-B	Art.	Cre.	Enc.	Ins.	Pla.	Sor.
Meta Pod	WBRG	2.21	4	28	10	30	14	10	0	6
Midrange Yisan	G	2.32	21	13	15	34	11	6	0	3
Mimeo Reanimator Hulk	UBG	2.26	4	26	7	24	6	25	0	10
Momir Hackball	UG	1.55	9	20	6	31	5	23	0	6
Najeela Hermit Hulk	WUBRG	1.69	0	29	5	25	6	26	0	9
Najeela Tempo	WUBRG	1.54	1	29	6	18	8	31	0	7
Nooze Reanimator	UBRG	2.03	3	27	9	21	9	19	0	13
Opus Thief	WUBR	1.91	1	29	14	9	7	25	0	15
Paradox Arcum	U	1.93	14	15	45	22	3	18	0	4
Paradox Scepter Thrasios	WUBG	1.68	1	27	13	12	5	32	0	10
Paradox Sisay	WG	2.13	5	25	20	34	7	10	0	5
Rad Farm	WUBG	1.53	2	28	9	17	10	26	0	8
Rashmi Control	UG	2.07	15	14	11	10	3	36	0	11
Razakats	WUBG	2.07	3	27	5	27	7	20	0	11
SBT Grave Combos	UBG	1.83	0	28	6	28	7	24	0	8
Scepter Control	UBG	1.88	6	26	11	9	9	27	0	12
Scion Reanimator	WUBRG	2.24	1	29	6	23	7	21	1	12
Seasons Pastigur	UBG	2.10	3	27	14	12	11	24	0	9
Selvala Brostorm	G	2.46	24	7	11	27	7	15	1	12
Shimmer Zur	WUB	1.80	9	20	22	5	3	31	0	11
Shuffle Hulk	WUBG	1.79	0	29	5	26	8	24	0	8
Sidisi Ad Naus Fishbowl	B	1.43	21	11	41	10	2	7	0	14
T&T Hulkball	WBRG	1.84	3	28	8	29	7	19	0	6
Tazri Hulk	WUBRG	1.92	0	28	6	26	6	25	0	10
Teferi Chain Veil	U	2.35	22	9	19	2	7	27	3	11
Varolz Hulk	BG	1.73	8	21	7	26	10	17	0	13
Zuran Consultation	WUB	1.81	3	28	16	6	7	30	0	10

3.1 Color Identity and Commanders

A look at top commanders, deck colors and mana symbol distribution.

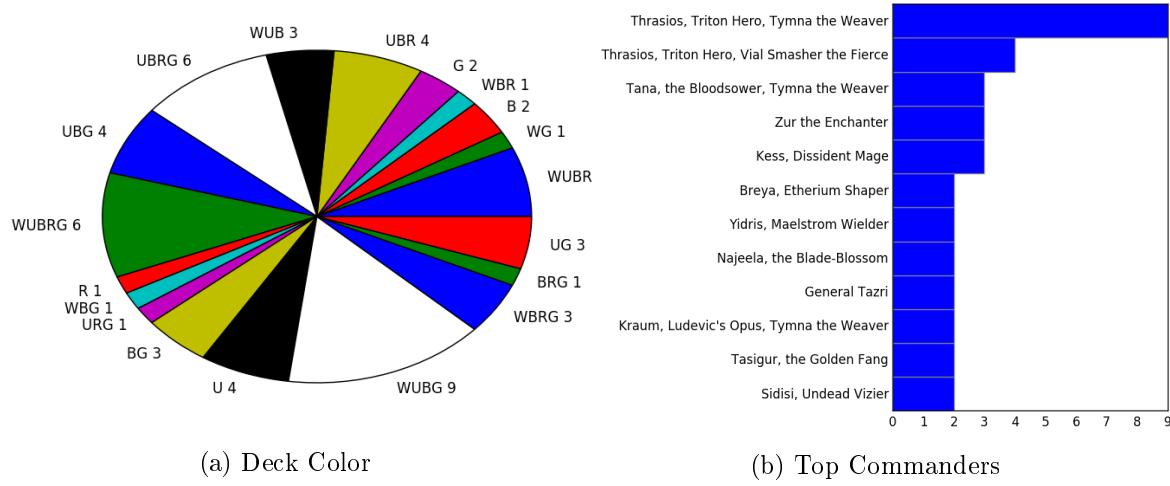


Figure 21: Commanders and Color Identity

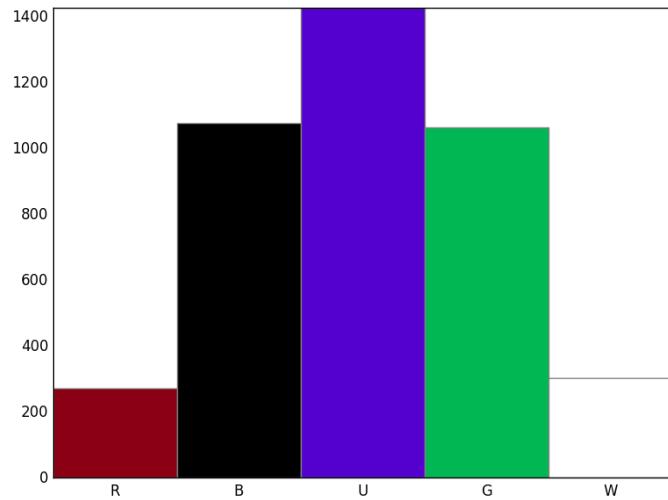


Figure 22: Mana Symbol Distribution

3.2 Deck Similarity

A quick look at cEDH deck similarity by cards in common.

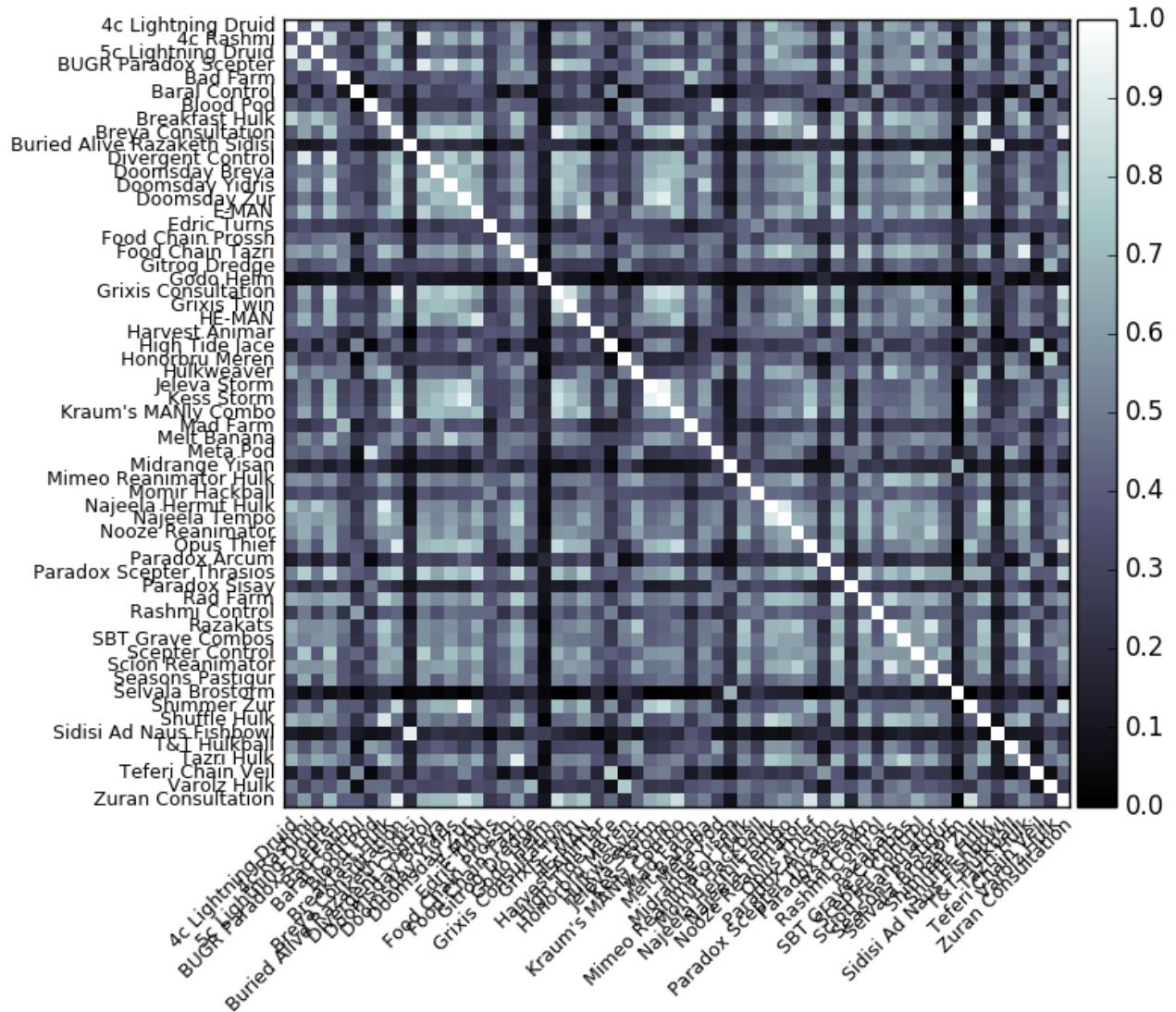


Figure 23: Deck Similarity

4 Deck Listings

This section lists each deck with some statistics. Three graphics are provided: the mana color pie, CMC histogram and card type histogram.

4.1 4c Lightning Druid

Deck Link: <https://deckstats.net/decks/50436/1152876-4c-lightning-druid/en>

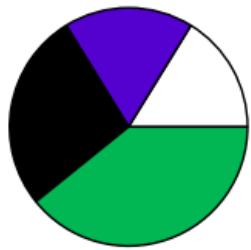
Discord Url: <https://discord.gg/n8xVUxu>

Author: frozeninfate (<https://deckstats.net/decks/50436/?lng=en>)

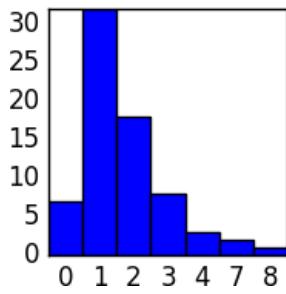
Commander(s): Thrasios, Triton Hero, Tymna the Weaver

Color: WUBG (W: 12 16.2% U: 13 17.6% B: 20 27.0% G: 29 39.2%)

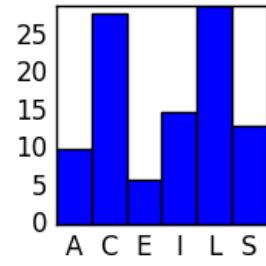
CMC: 1.77



(a) Mana Pie



(b) CMC Histogram



(c) Card Type Histogram

Figure 24: 4c Lightning Druid

Decklist: 4c Lightning Druid, Cockatrice Hash: 6ktgk2hc

Commander (2)	Instant (15)	Artifact (10)
1x Thrasios, Triton Hero	1x Chain of Vapor	1x Aether Spellbomb
1x Tymna the Weaver	1x Daze	1x Chrome Mox
Land (29)	1x Eladamri's Call	1x Lightning Greaves
1x Arid Mesa	1x Enlightened Tutor	1x Lion's Eye Diamond
1x Bayou	1x Entomb	1x Lotus Petal
1x Bloodstained Mire	1x Flash	1x Mana Crypt
1x Breeding Pool	1x Lim-Dûl's Vault	1x Mox Diamond
1x City of Brass	1x Mental Misstep	1x Serum Powder
1x Command Tower	1x Mystical Tutor	1x Shuko
1x Dryad Arbor	1x Noxious Revival	1x Sol Ring
1x Exotic Orchard	1x Pact of Negation	Creature (25)
1x Flooded Strand	1x Shallow Grave	1x Angel of Glory's Rise
1x Forbidden Orchard	1x Summoner's Pact	1x Arbor Elf
1x Gemstone Caverns	1x Vampiric Tutor	1x Auriok Salvagers
1x Gemstone Mine	1x Worldly Tutor	1x Avacyn's Pilgrim
1x Llanowar Wastes	Enchantment (6)	1x Birds of Paradise
1x Mana Confluence	1x Animate Dead	1x Boreal Druid
1x Marsh Flats	1x Carpet of Flowers	1x Cephalid Illusionist
1x Misty Rainforest	1x Concordant Crossroads	1x Deathrite Shaman
1x Overgrown Tomb	1x Dance of the Dead	1x Elves of Deep Shadow
1x Polluted Delta	1x Utopia Sprawl	1x Elvish Mystic
1x Savannah	1x Wild Growth	1x Elvish Spirit Guide
1x Scalding Tarn	Sorcery (13)	1x Eternal Witness
1x Scrubland	1x Cabal Therapy	1x Fatestitcher
1x Tarnished Citadel	1x Demonic Tutor	1x Fyndhorn Elves
1x Tropical Island	1x Diabolic Intent	1x Grand Abolisher
1x Tundra	1x Dread Return	1x Hermit Druid
1x Underground Sea	1x Eldritch Evolution	1x Llanowar Elves
1x Verdant Catacombs	1x Green Sun's Zenith	1x Narcomoeba
1x Watery Grave	1x Imperial Seal	1x Noble Hierarch
1x Windswept Heath	1x Life // Death	1x Nomads en-Kor
1x Wooded Foothills	1x Merchant Scroll	1x Protean Hulk
	1x Postmortem Lunge	1x Razaketh, the Foulblooded
	1x Reanimate	1x Shaman en-Kor
	1x Show and Tell	1x Spellseeker
	1x Sylvan Tutor	1x Warrior en-Kor

4.2 4c Rashmi

Deck Link: <https://tappedout.net/mtg-decks/4c-rashmi/>

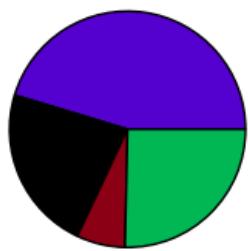
Discord Url: <https://discord.gg/5vvVsTu>

Author: LabManiac_Sigi (https://tappedout.net/users/LabManiac_Sigi)

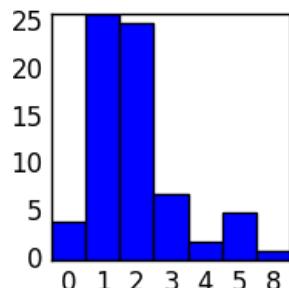
Commander(s): Thrasios, Triton Hero, Vial Smasher the Fierce

Color: UBRG (U: 34 45.3% B: 17 22.7% R: 5 6.7% G: 19 25.3%)

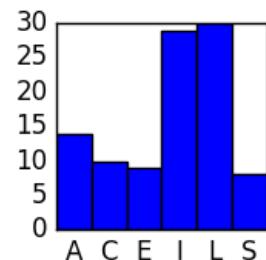
CMC: 1.97



(a) Mana Pie



(b) CMC Histogram



(c) Card Type Histogram

Figure 25: 4c Rashmi

Decklist: 4c Rashmi, Cockatrice Hash: g0fndq7k

Commander (2)	Instant (29)	Enchantment (9)
1x Thrasios, Triton Hero	1x Abrupt Decay	1x Carpet of Flowers
1x Vial Smasher the Fierce	1x Assassin's Trophy	1x Compost
	1x Brainstorm	1x Copy Artifact
	1x Chain of Vapor	1x Curiosity
Land (30)	1x Counterspell	1x Exploration
1x Badlands	1x Cyclonic Rift	1x Keen Sense
1x Bayou	1x Delay	1x Mystic Remora
1x Bloodstained Mire	1x Dig Through Time	1x Rhystic Study
1x Breeding Pool	1x Dispel	1x Sylvan Library
1x City of Brass	1x Dramatic Reversal	
1x Command Tower	1x Fact or Fiction	
1x Exotic Orchard	1x Fire Covenant	Sorcery (8)
1x Flooded Strand	1x Flusterstorm	1x Demonic Tutor
1x Forbidden Orchard	1x Force of Will	1x Gitaxian Probe
1x Forest	1x Kozilek's Return	1x Imperial Seal
1x Island	1x Lim-Dûl's Vault	1x Massacre
1x Mana Confluence	1x Mana Drain	1x Ponder
1x Marsh Flats	1x Mental Misstep	1x Preordain
1x Misty Rainforest	1x Misdirection	1x Regrowth
1x Morphic Pool	1x Mystical Tutor	1x Toxic Deluge
1x Overgrown Tomb	1x Nature's Claim	
1x Polluted Delta	1x Negate	Artifact (14)
1x Scalding Tarn	1x Noxious Revival	1x Chrome Mox
1x Steam Vents	1x Pact of Negation	1x Dimir Signet
1x Taiga	1x Pyroblast	1x Fellwar Stone
1x Tarnished Citadel	1x Reap	1x Grafdigger's Cage
1x Tropical Island	1x Swan Song	1x Isochron Scepter
1x Underground River	1x Vampiric Tutor	1x Mana Crypt
1x Underground Sea	1x Winds of Rebuke	1x Mana Vault
1x Verdant Catacombs		1x Mox Diamond
1x Volcanic Island		1x Paradox Engine
1x Watery Grave		1x Rakdos Signet
1x Windswept Heath		1x Sensei's Divining Top
1x Wooded Foothills		1x Simic Signet
1x Yavimaya Coast		1x Sol Ring
		1x Talisman of Dominance
		Creature (8)
		1x Azra Oddsmaker
		1x Birds of Paradise
		1x Bloom Tender
		1x Deathrite Shaman
		1x Runic Armasaur
		1x Seedborn Muse
		1x Street Wraith
		1x Sygg, River Cutthroat

4.3 5c Lightning Druid

Deck Link: <https://deckstats.net/decks/50436/1145708-extremespeed-lightning-druid-e>

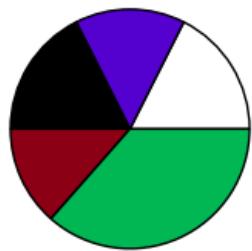
Discord Url: <https://discord.gg/n8xVUxu>

Author: frozeninfate (<https://deckstats.net/decks/50436/?lng=en>)

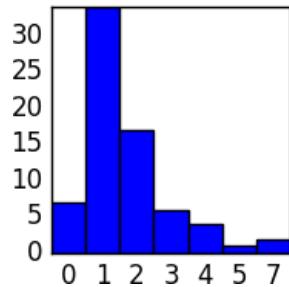
Commander(s): Sliver Queen

Color: WUBRG (W: 13 17.6% U: 11 14.9% B: 13 17.6% R: 10 13.5% G: 27 36.5%)

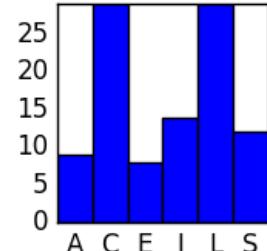
CMC: 1.70



(a) Mana Pie



(b) CMC Histogram



(c) Card Type Histogram

Figure 26: 5c Lightning Druid

Decklist: 5c Lightning Druid, Cockatrice Hash: p17lasl

Commander (1)	Instant (14)	Artifact (9)
1x Sliver Queen	1x Chain of Vapor 1x Eladamri's Call	1x Chrome Mox 1x Lightning Greaves 1x Lion's Eye Diamond
Land (29)	1x Enlightened Tutor 1x Entomb 1x Flash 1x Lim-Dûl's Vault 1x Mental Misstep 1x Mystical Tutor 1x Noxious Revival 1x Pact of Negation 1x Shallow Grave 1x Summoner's Pact 1x Vampiric Tutor 1x Worldly Tutor	1x Lotus Petal 1x Mana Crypt 1x Mox Diamond 1x Serum Powder 1x Shuko 1x Sol Ring
1x Arid Mesa		
1x Badlands		
1x Bayou		
1x Bloodstained Mire		
1x City of Brass		
1x Command Tower		
1x Dryad Arbor		
1x Exotic Orchard		
1x Flooded Strand		
1x Forbidden Orchard		
1x Gemstone Caverns		
1x Gemstone Mine		
1x Mana Confluence	Enchantment (8)	
1x Marsh Flats	1x Carpet of Flowers 1x Concordant Crossroads 1x Mass Hysteria 1x Need for Speed 1x Survival of the Fittest 1x Sylvan Library 1x Utopia Sprawl 1x Wild Growth	
1x Misty Rainforest		
1x Polluted Delta		
1x Savannah		
1x Scalding Tarn		
1x Scrubland		
1x Stomping Ground		
1x Taiga		
1x Tarnished Citadel	Sorcery (12)	
1x Tropical Island	1x Altar of Bone 1x Cabal Therapy 1x Demonic Tutor 1x Diabolic Intent 1x Dread Return 1x Eldritch Evolution 1x Gamble 1x Green Sun's Zenith 1x Imperial Seal 1x Maximize Velocity 1x Merchant Scroll 1x Postmortem Lunge	
1x Tundra		
1x Underground Sea		
1x Verdant Catacombs		
1x Volcanic Island		
1x Windswept Heath		
1x Wooded Foothills		

4.4 BUGR Paradox Scepter

Deck Link: <http://tappedout.net/mtg-decks/thrasios-eggs-prototype-copy/>

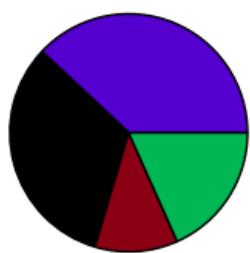
Discord Url: <https://discord.gg/YGsZTu>

Author: Lilbrudder (<https://tappedout.net/users/Lilbrudder>)

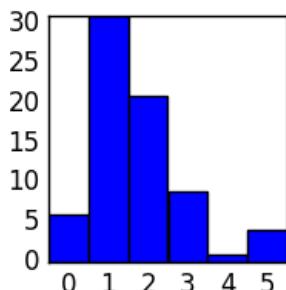
Commander(s): Thrasios, Triton Hero, Vial Smasher the Fierce

Color: UBRG (U: 27 38.0% B: 23 32.4% R: 8 11.3% G: 13 18.3%)

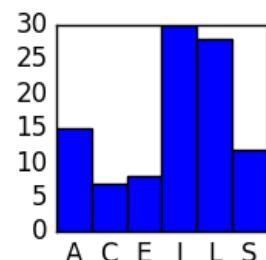
CMC: 1.72



(a) Mana Pie



(b) CMC Histogram



(c) Card Type Histogram

Figure 27: BUGR Paradox Scepter

Decklist: BUGR Paradox Scepter, Cockatrice Hash: att7ij9v

Commander (2)	Instant (30)	Enchantment (8)
1x Thrasios, Triton Hero	1x Abrupt Decay	1x Carpet of Flowers
1x Vial Smasher the Fierce	1x Ad Nauseam	1x Copy Artifact
Land (28)	1x Assassin's Trophy	1x Curiosity
1x Ancient Tomb	1x Brainstorm	1x Keen Sense
1x Badlands	1x Cabal Ritual	1x Mystic Remora
1x Bayou	1x Chain of Vapor	1x Necropotence
1x Bloodstained Mire	1x Cyclonic Rift	1x Rhystic Study
1x Breeding Pool	1x Dark Ritual	1x Sylvan Library
1x City of Brass	1x Dispel	
1x Command Tower	1x Dramatic Reversal	Sorcery (12)
1x Exotic Orchard	1x Fire Covenant	1x Dark Petition
1x Flooded Strand	1x Flusterstorm	1x Demonic Tutor
1x Forbidden Orchard	1x Force of Will	1x Gamble
1x Forest	1x Impulse	1x Gitaxian Probe
1x Island	1x Intuition	1x Imperial Seal
1x Mana Confluence	1x Lim-Dûl's Vault	1x Ponder
1x Marsh Flats	1x Mana Drain	1x Preordain
1x Misty Rainforest	1x Manamorphose	1x Rolling Earthquake
1x Morphic Pool	1x Mental Misstep	1x Timetwister
1x Overgrown Tomb	1x Mystical Tutor	1x Toxic Deluge
1x Polluted Delta	1x Natural State	1x Wheel of Fortune
1x Scalding Tarn	1x Nature's Claim	1x Yawgmoth's Will
1x Steam Vents	1x Noxious Revival	
1x Tropical Island	1x Opt	Artifact (15)
1x Underground River	1x Pact of Negation	1x Chrome Mox
1x Underground Sea	1x Pyroblast	1x Dimir Signet
1x Verdant Catacombs	1x Red Elemental Blast	1x Fellwar Stone
1x Volcanic Island	1x Swan Song	1x Grim Monolith
1x Watery Grave	1x Tainted Pact	1x Isochron Scepter
1x Windswept Heath	1x Vampiric Tutor	1x Lotus Petal
1x Wooded Foothills		1x Mana Crypt
		1x Mana Vault
		1x Mox Diamond
		1x Mox Opal
		1x Paradox Engine
		1x Sensei's Divining Top
		1x Sol Ring
		1x Talisman of Dominance
		1x Talisman of Indulgence
		Creature (5)
		1x Arbor Elf
		1x Birds of Paradise
		1x Dark Confidant
		1x Deathrite Shaman
		1x Notion Thief

4.5 Bad Farm

Deck Link: <http://tappedout.net/mtg-decks/bad-farm/>

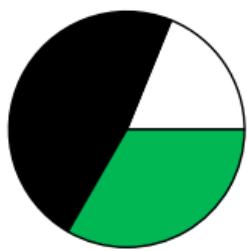
Discord Url: N/A

Author: Leptys (<https://tappedout.net/users/Leptys>)

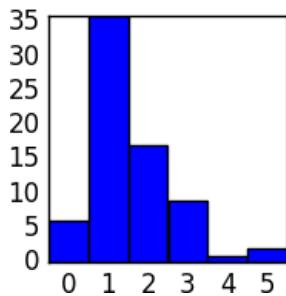
Commander(s): Ikra Shidiqi, the Usurper, Tymna the Weaver

Color: WBG (W: 13 18.8% B: 33 47.8% G: 23 33.3%)

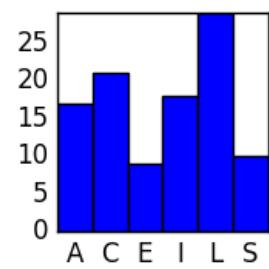
CMC: 1.56



(a) Mana Pie



(b) CMC Histogram



(c) Card Type Histogram

Figure 28: Bad Farm

Decklist: Bad Farm, Cockatrice Hash: 52trbbmm

Commander (2)	Instant (18)	Sorcery (10)
1x Ikra Shidiqi, the Usurper	1x Abrupt Decay	1x Cabal Therapy
1x Tymna the Weaver	1x Ad Nauseam	1x Demonic Tutor
Land (29)	Instant (18)	Sorcery (10)
1x Ancient Tomb	1x Angel's Grace	1x Diabolic Intent
1x Arid Mesa	1x Assassin's Trophy	1x Grim Tutor
1x Bayou	1x Cabal Ritual	1x Imperial Seal
1x Bloodstained Mire	1x Crop Rotation	1x Praetor's Grasp
1x Boseiju, Who Shelters All	1x Culling the Weak	1x Regrowth
1x Cavern of Souls	1x Dark Ritual	1x Sickening Dreams
1x Command Tower	1x Enlightened Tutor	1x Thoughtseize
1x Flooded Strand	1x Entomb	1x Yawgmoth's Will
1x Forest	1x Mana Tithe	
1x Gaea's Cradle	1x Nature's Claim	
1x Gemstone Caverns	1x Noxious Revival	
1x Godless Shrine	1x Rain of Filth	
1x Marsh Flats	1x Silence	
1x Misty Rainforest	1x Swords to Plowshares	
1x Overgrown Tomb	1x Tainted Pact	
1x Phyrexian Tower	1x Vampiric Tutor	
1x Polluted Delta		
1x Savannah		
1x Scavenger Grounds	Enchantment (9)	
1x Scrubland	1x Animate Dead	
1x Snow-Covered Forest	1x Carpet of Flowers	
1x Snow-Covered Plains	1x Earthcraft	
1x Snow-Covered Swamp	1x Exploration	
1x Temple Garden	1x Necromancy	
1x Urborg, Tomb of Yawgmoth	1x Necropotence	
1x Vault of Whispers	1x Pernicious Deed	
1x Verdant Catacombs	1x Smothering Tithe	
1x Windswept Heath	1x Squirrel Nest	
1x Wooded Foothills		
Artifact (13)		
	1x Altar of the Brood	
	1x Chrome Mox	
	1x Grim Monolith	
	1x Lotus Petal	
	1x Mana Crypt	
	1x Mana Vault	
	1x Mox Diamond	
	1x Mox Opal	
	1x Nihil Spellbomb	
	1x Scroll Rack	
	1x Sensei's Divining Top	
	1x Skullclamp	
	1x Sol Ring	
Creature (19)		
	1x Arbor Elf	
	1x Avacyn's Pilgrim	
	1x Children of Korlis	
	1x Dark Confidant	
	1x Deathrite Shaman	
	1x Elves of Deep Shadow	
	1x Elvish Mystic	
	1x Elvish Spirit Guide	
	1x Fyndhorn Elves	
	1x Grand Abolisher	
	1x Hope of Ghirapur	
	1x Krosan Wayfarer	
	1x Leonin Relic-Warder	
	1x Llanowar Elves	
	1x Memnite	
	1x Myr Moonvessel	
	1x Priest of Titania	
	1x Serra Ascendant	
	1x Zulaport Cutthroat	

4.6 Baral Control

Deck Link: <https://tappedout.net/mtg-decks/baral-draw-go-2/>

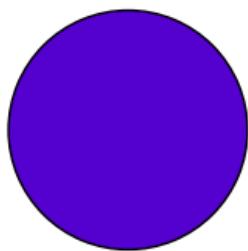
Discord Url: <https://discord.gg/UQbRkH>

Author: asm (<https://tappedout.net/users/asm>)

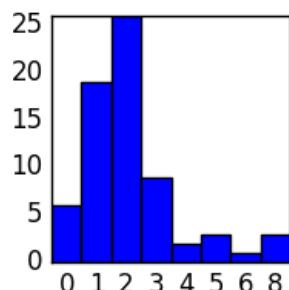
Commander(s): Baral, Chief of Compliance

Color: U (U: 62 100.0%)

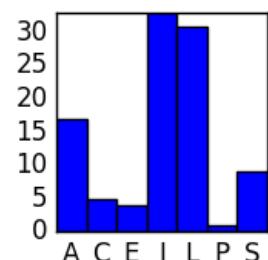
CMC: 2.19



(a) Mana Pie



(b) CMC Histogram



(c) Card Type Histogram

Figure 29: Baral Control

Decklist: Baral Control, Cockatrice Hash: k90d2rl3

Commander (1)	Instant (33)	Artifact (17)
1x Baral, Chief of Compliance	1x Anticipate 1x Blue Sun's Zenith 1x Brainstorm 1x Chain of Vapor 1x Counterspell 1x Cyclonic Rift 1x Delay 1x Dig Through Time 1x Dispel 1x Dramatic Reversal 1x Fact or Fiction 1x Flusterstorm 1x Force of Will 1x Impulse 1x Mana Drain 1x Mana Leak 1x Mental Misstep 1x Muddle the Mixture 1x Mystic Confluence 1x Mystical Tutor 1x Negate 1x Obsessive Search 1x Opt 1x Pact of Negation 1x Pull from Tomorrow 1x Reality Shift 1x Remand 1x Spell Pierce 1x Stroke of Genius 1x Swan Song 1x Thirst for Knowledge 1x Unwind 1x Whir of Invention	1x Chrome Mox 1x Cursed Totem 1x Fellwar Stone 1x Grafdigger's Cage 1x Grim Monolith 1x Isochron Scepter 1x Mana Crypt 1x Mana Vault 1x Mox Amber 1x Mox Diamond 1x Mox Opal 1x Paradox Engine 1x Prismatic Lens 1x Sapphire Medallion 1x Sensei's Divining Top 1x Sol Ring 1x Voltaic Key
Land (31)		
1x Ancient Tomb 1x Flooded Strand 1x Inventors' Fair 1x Misty Rainforest 1x Polluted Delta 1x Scalding Tarn 25x Snow-Covered Island		
Enchantment (4)		
1x Back to Basics 1x Copy Artifact 1x Mystic Remora 1x Rhystic Study		
Sorcery (9)		
1x Chart a Course 1x Deep Analysis 1x Fabricate 1x Merchant Scroll 1x Ponder 1x Preordain 1x Sleight of Hand 1x Timetwister 1x Treasure Cruise		
Planeswalker (1)		
1x Ugin, the Spirit Dragon		
Creature (4)		
1x Consecrated Sphinx 1x Gilded Drake 1x Snapcaster Mage 1x Thing in the Ice		

4.7 Blood Pod

Deck Link: <http://tappedout.net/mtg-decks/tana-and-tymna-blood-pod-primer/>

Discord Url: <https://discord.gg/q7Ehb9d>

Author: LabManiac_Luke (https://tappedout.net/users/LabManiac_Luke)

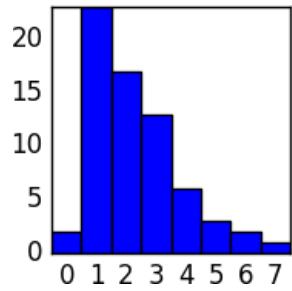
Commander(s): Tana, the Bloodsower, Tymna the Weaver

Color: WBRG (W: 23 29.1% B: 15 19.0% R: 12 15.2% G: 29 36.7%)

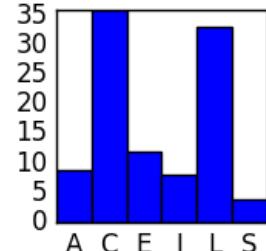
CMC: 2.30



(a) Mana Pie



(b) CMC Histogram



(c) Card Type Histogram

Figure 30: Blood Pod

Decklist: Blood Pod, Cockatrice Hash: hclggung

Commander (2)	Instant (8)	Creature (34)
1x Tana, the Bloodsower	1x Abrupt Decay	1x Anafenza, the Foremost
1x Tymna the Weaver	1x Enlightened Tutor	1x Arbor Elf
	1x Fire Covenant	1x Avacyn's Pilgrim
	1x Nature's Claim	1x Aven Mindcensor
	1x Pyroblast	1x Birds of Paradise
	1x Swords to Plowshares	1x Bloom Tender
	1x Vampiric Tutor	1x Caustic Caterpillar
	1x Worldly Tutor	1x Dark Confidant
		1x Deathrite Shaman
		1x Eidolon of Rhetoric
		1x Elesh Norn, Grand Cenobite
		1x Elves of Deep Shadow
		1x Elvish Mystic
		1x Eternal Witness
		1x Ethersworn Canonist
		1x Felidar Guardian
		1x Fyndhorn Elves
		1x Karmic Guide
		1x Kataki, War's Wage
		1x Kiki-Jiki, Mirror Breaker
		1x Linvala, Keeper of Silence
		1x Llanowar Elves
		1x Magus of the Moon
		1x Reclamation Sage
		1x Scavenging Ooze
		1x Serra Ascendant
		1x Sire of Insanity
		1x Sun Titan
		1x Tendershoot Dryad
		1x Thalia, Guardian of Thraben
		1x Ulvenwald Tracker
		1x Vexing Shusher
		1x Village Bell-Ringer
		1x Yisan, the Wanderer Bard
Land (33)	Enchantment (11)	
1x Arid Mesa	1x Animate Dead	
1x Badlands	1x Blood Moon	
1x Bayou	1x Carpet of Flowers	
1x Bloodstained Mire	1x Leyline of the Void	
1x Brushland	1x Luminarch Ascension	
1x City of Brass	1x Root Maze	
1x Command Tower	1x Rule of Law	
1x Flooded Strand	1x Stony Silence	
4x Forest	1x Stranglehold	
1x Gaea's Cradle	1x Survival of the Fittest	
1x Horizon Canopy	1x Sylvan Library	
1x Llanowar Wastes		
1x Mana Confluence		
1x Marsh Flats		
1x Misty Rainforest		
1x Overgrown Tomb		
1x Plains		
1x Plateau		
1x Polluted Delta		
1x Savannah		
1x Scrubland		
1x Stomping Ground		
1x Strip Mine		
1x Swamp		
1x Taiga		
1x Temple Garden		
1x Urborg, Tomb of Yawgmoth		
1x Verdant Catacombs		
1x Windswept Heath		
1x Wooded Foothills		
Sorcery (4)		
Artifact (8)		

4.8 Breakfast Hulk

Deck Link: <http://tappedout.net/mtg-decks/breakfast-hulk/>

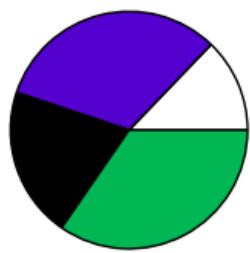
Discord Url: <https://discord.gg/n8xVUxu>

Author: LabManiac_Sigi (https://tappedout.net/users/LabManiac_Sigi)

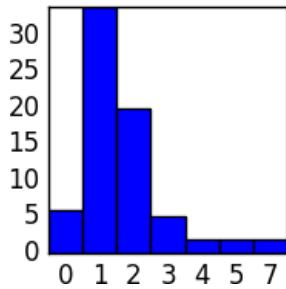
Commander(s): Thrasios, Triton Hero, Tymna the Weaver

Color: WUBG (W: 10 12.8% U: 25 32.1% B: 16 20.5% G: 27 34.6%)

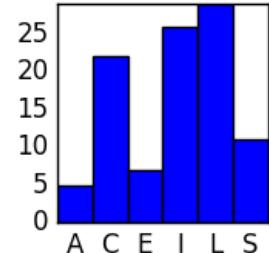
CMC: 1.70



(a) Mana Pie



(b) CMC Histogram



(c) Card Type Histogram

Figure 31: Breakfast Hulk

Decklist: Breakfast Hulk, Cockatrice Hash: hdsqsrvg

Commander (2)	Instant (26)	Sorcery (11)
1x Thrasios, Triton Hero	1x Abrupt Decay	1x Cabal Therapy
1x Tymna the Weaver	1x Ad Nauseam	1x Demonic Tutor
	1x Assassin's Trophy	1x Diabolic Intent
Land (29)	1x Autumn's Veil	1x Dread Return
1x Bayou	1x Brainstorm	1x Gitaxian Probe
1x Bloodstained Mire	1x Chain of Vapor	1x Imperial Seal
1x Breeding Pool	1x Cyclonic Rift	1x Ponder
1x City of Brass	1x Delay	1x Postmortem Lunge
1x Command Tower	1x Dispel	1x Preordain
1x Exotic Orchard	1x Eladamri's Call	1x Sylvan Tutor
1x Flooded Strand	1x Enlightened Tutor	1x Timetwister
1x Forbidden Orchard	1x Flash	
1x Gaea's Cradle	1x Flusterstorm	Artifact (5)
1x Gemstone Caverns	1x Force of Will	1x Chrome Mox
1x Gemstone Mine	1x Lim-Dûl's Vault	1x Lion's Eye Diamond
1x Mana Confluence	1x Memory's Journey	1x Mana Crypt
1x Marsh Flats	1x Mental Misstep	1x Mox Diamond
1x Misty Rainforest	1x Mystical Tutor	1x Sol Ring
1x Morphic Pool	1x Nature's Claim	
1x Overgrown Tomb	1x Noxious Revival	Creature (20)
1x Polluted Delta	1x Pact of Negation	1x Angel of Glory's Rise
1x Savannah	1x Silence	1x Auriok Salvagers
1x Scalding Tarn	1x Summoner's Pact	1x Avacyn's Pilgrim
1x Scrubland	1x Swan Song	1x Birds of Paradise
1x Tarnished Citadel	1x Vampiric Tutor	1x Bloom Tender
1x Tropical Island	1x Worldly Tutor	1x Cephalid Illusionist
1x Tundra		1x Dark Confidant
1x Underground Sea	Enchantment (7)	1x Deathrite Shaman
1x Verdant Catacombs	1x Carpet of Flowers	1x Elves of Deep Shadow
1x Watery Grave	1x Freed from the Real	1x Eternal Witness
1x Windswept Heath	1x Mystic Remora	1x Fyndhorn Elves
1x Wooded Foothills	1x Survival of the Fittest	1x Gilded Drake
1x Yavimaya Coast	1x Sylvan Library	1x Grand Abolisher
	1x Utopia Sprawl	1x Hermit Druid
	1x Wild Growth	1x Llanowar Elves
		1x Narcomoeba
		1x Noble Hierarch
		1x Nomads en-Kor
		1x Protean Hulk
		1x Spellseeker

4.9 Breya Consultation

Deck Link: <http://tappedout.net/mtg-decks/shaper-taint/>

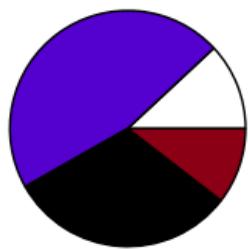
Discord Url: N/A

Author: Nakhla (<https://tappedout.net/users/Nakhla>)

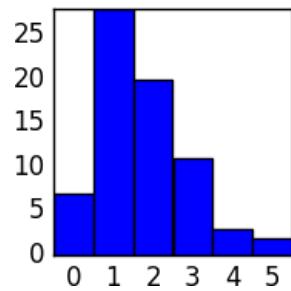
Commander(s): Breya, Etherium Shaper

Color: WUBR (W: 8 11.9% U: 31 46.3% B: 21 31.3% R: 7 10.4%)

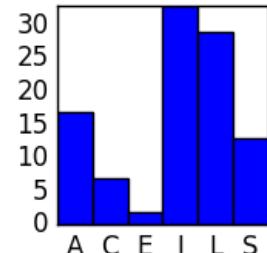
CMC: 1.73



(a) Mana Pie



(b) CMC Histogram



(c) Card Type Histogram

Figure 32: Breya Consultation

Decklist: Breya Consultation, Cockatrice Hash: nrbgcv8b

Commander (1)	Instant (33)	Sorcery (13)
1x Breya, Etherium Shaper	1x Ad Nauseam 1x Angel's Grace 1x Brainstorm 1x Cabal Ritual 1x Chain of Vapor 1x Counterspell 1x Cyclonic Rift 1x Dark Ritual 1x Delay 1x Demonic Consultation 1x Dispel 1x Dramatic Reversal 1x Enlightened Tutor 1x Flusterstorm 1x Force of Will 1x Frantic Search 1x Into the Roil 1x Lim-Dûl's Vault 1x Mana Drain 1x Mental Misstep 1x Mystical Tutor 1x Negate 1x Pact of Negation 1x Plunge into Darkness 1x Pyroblast 1x Red Elemental Blast 1x Silence 1x Spell Pierce 1x Swan Song 1x Swords to Plowshares 1x Tainted Pact 1x Vampiric Tutor 1x Wear // Tear	1x Demonic Tutor 1x Gamble 1x Gitaxian Probe 1x Imperial Seal 1x Ponder 1x Praetor's Grasp 1x Preordain 1x Rolling Earthquake 1x Timetwister 1x Toxic Deluge 1x Wheel of Fortune 1x Windfall 1x Yawgmoth's Will
Land (29)		Artifact (16)
1x Ancient Tomb 1x Arid Mesa 1x Badlands 1x Bloodstained Mire 1x City of Brass 1x Command Tower 1x Exotic Orchard 1x Flooded Strand 1x Forbidden Orchard 1x Gemstone Caverns 1x Hallowed Fountain 1x Mana Confluence 1x Marsh Flats 1x Misty Rainforest 1x Morphic Pool 1x Polluted Delta 1x Scalding Tarn 1x Scrubland 1x Snow-Covered Island 1x Snow-Covered Swamp 1x Steam Vents 1x Tarnished Citadel 1x Tundra 1x Underground Sea 1x Verdant Catacombs 1x Volcanic Island 1x Watery Grave 1x Windswept Heath 1x Wooded Foothills		1x Chrome Mox 1x Dimir Signet 1x Fellwar Stone 1x Grafdigger's Cage 1x Grim Monolith 1x Isochron Scepter 1x Lion's Eye Diamond 1x Lotus Petal 1x Mana Crypt 1x Mana Vault 1x Mox Diamond 1x Mox Opal 1x Sensei's Divining Top 1x Sol Ring 1x Talisman of Dominance 1x Talisman of Progress
Enchantment (2)		Creature (6)
1x Mystic Remora 1x Necropotence		1x Auriok Salvagers 1x Aven Mindcensor 1x Dark Confidant 1x Jace, Vryn's Prodigy 1x Laboratory Maniac 1x Notion Thief

4.10 Buried Alive Razaketh Sidisi

Deck Link: <https://tappedout.net/mtg-decks/buried-alive-sidisi/>

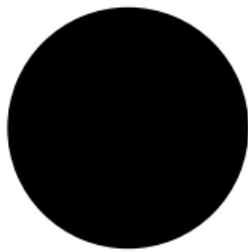
Discord Url: <https://discord.gg/abTZ8rT>

Author: marsthesoos (<https://tappedout.net/users/marsthesoos>)

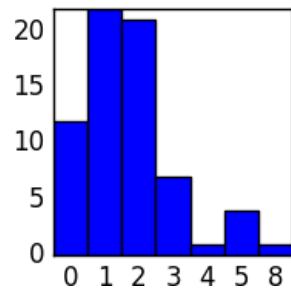
Commander(s): Sidisi, Undead Vizier

Color: B (B: 45 100.0%)

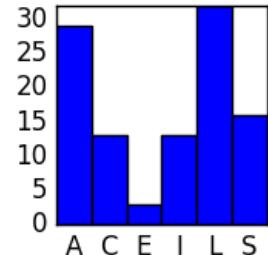
CMC: 1.72



(a) Mana Pie



(b) CMC Histogram



(c) Card Type Histogram

Figure 33: Buried Alive Razaketh Sidisi

Decklist: Buried Alive Razaketh Sidisi, Cockatrice Hash: q6cef9dj

Commander (1)	Sorcery (16)	Artifact (23)
1x Sidisi, Undead Vizier	1x Bubbling Muck 1x Buried Alive 1x Cabal Therapy 1x Collective Brutality 1x Deathmark 1x Demonic Tutor 1x Diabolic Intent 1x Duress 1x Exhume 1x Exsanguinate 1x Imperial Seal 1x Inquisition of Kozilek 1x Reanimate 1x Thoughtseize 1x Toxic Deluge 1x Yawgmoth's Will	1x Aetherflux Reservoir 1x Basalt Monolith 1x Chrome Mox 1x Defense Grid 1x Everflowing Chalice 1x Fellwar Stone 1x Grim Monolith 1x Helm of Awakening 1x Jet Medallion 1x Lion's Eye Diamond 1x Lotus Petal 1x Mana Crypt 1x Mana Vault 1x Mind Stone 1x Mox Diamond 1x Mox Opal 1x Paradox Engine 1x Prismatic Lens 1x Rings of Brightearth 1x Sensei's Divining Top 1x Sol Ring 1x Springleaf Drum 1x Voltaic Key
Land (32)	Creature (12)	
1x Ancient Tomb 1x Boseiju, Who Shelters All 1x Cavern of Souls 1x City of Traitors 1x Crystal Vein 1x Ebon Stronghold 1x Gemstone Caverns 1x Lake of the Dead 1x Peat Bog 1x Phyrexian Tower 21x Swamp 1x Urborg, Tomb of Yawgmoth	1x Apprentice Necromancer 1x Blood Pet 1x Bloodghast 1x Hope of Ghirapur 1x Leaden Myr 1x Memnite 1x Ornithopter 1x Phyrexian Delver 1x Phyrexian Walker 1x Razaketh, the Foulblooded 1x Reassembling Skeleton 1x Shield Sphere	
Instant (13)		
1x Ad Nauseam 1x Cabal Ritual 1x Corpse Dance 1x Culling the Weak 1x Dark Ritual 1x Entomb 1x Goryo's Vengeance 1x Rain of Filth 1x Sacrifice 1x Shallow Grave 1x Slaughter Pact 1x Songs of the Damned 1x Vampiric Tutor		
Enchantment (3)		
1x Animate Dead 1x Dance of the Dead 1x Necromancy		

4.11 Divergent Control

Deck Link: <https://tappedout.net/mtg-decks/bugr-divergent-control/>

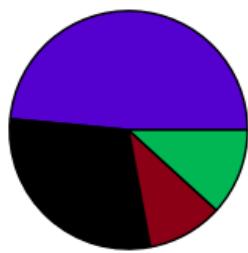
Discord Url: N/A

Author: LabManiac_Sigi (https://tappedout.net/users/LabManiac_Sigi)

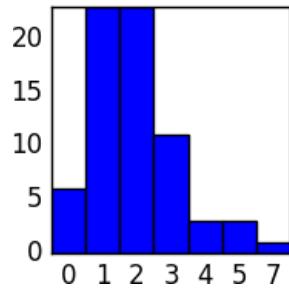
Commander(s): Thrasios, Triton Hero, Vial Smasher the Fierce

Color: UBRG (U: 33 48.5% B: 20 29.4% R: 7 10.3% G: 8 11.8%)

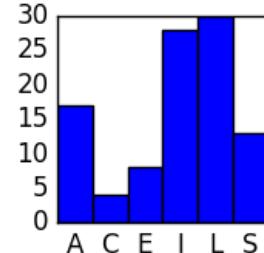
CMC: 1.94



(a) Mana Pie



(b) CMC Histogram



(c) Card Type Histogram

Figure 34: Divergent Control

Decklist: Divergent Control, Cockatrice Hash: 0kg20lnq

Commander (2)	Instant (28)	Enchantment (8)
1x Thrasios, Triton Hero	1x Abrupt Decay	1x Carpet of Flowers
1x Vial Smasher the Fierce	1x Ad Nauseam	1x Compost
	1x Assassin's Trophy	1x Copy Artifact
Land (30)	Instant (28)	Enchantment (8)
1x Ancient Tomb	1x Brainstorm	1x Mystic Remora
1x Badlands	1x Chain of Vapor	1x Necropotence
1x Bayou	1x Counterspell	1x Rhystic Study
1x Bloodstained Mire	1x Cyclonic Rift	1x Sylvan Library
1x Breeding Pool	1x Dark Ritual	1x Training Grounds
1x City of Brass	1x Delay	
1x Command Tower	1x Dispel	
1x Exotic Orchard	1x Divergent Transformations	Sorcery (13)
1x Flooded Strand	1x Dramatic Reversal	1x Demonic Tutor
1x Forbidden Orchard	1x Fact or Fiction	1x Gamble
1x Forest	1x Fire Covenant	1x Imperial Seal
1x Island	1x Flusterstorm	1x Massacre
1x Mana Confluence	1x Force of Will	1x Mnemonic Betrayal
1x Marsh Flats	1x Kozilek's Return	1x Ponder
1x Misty Rainforest	1x Lim-Dûl's Vault	1x Preordain
1x Morphic Pool	1x Mana Drain	1x Reanimate
1x Overgrown Tomb	1x Mental Misstep	1x Timetwister
1x Polluted Delta	1x Mystical Tutor	1x Toxic Deluge
1x Scalding Tarn	1x Nature's Claim	1x Transmute Artifact
1x Steam Vents	1x Negate	1x Wheel of Fortune
1x Tarnished Citadel	1x Noxious Revival	1x Windfall
1x Tropical Island	1x Pact of Negation	
1x Underground River	1x Pyroblast	Artifact (17)
1x Underground Sea	1x Swan Song	1x Chrome Mox
1x Verdant Catacombs	1x Vampiric Tutor	1x Dimir Signet
1x Volcanic Island		1x Fellwar Stone
1x Watery Grave		1x Grim Monolith
1x Windswept Heath		1x Isochron Scepter
1x Wooded Foothills		1x Izzet Signet
1x Yavimaya Coast		1x Mana Crypt
Creature (2)		1x Mana Vault
1x Notion Thief		1x Mox Amber
1x Whirlpool Warrior		1x Mox Diamond
		1x Mox Opal
		1x Paradox Engine
		1x Sensei's Divining Top
		1x Simic Signet
		1x Sol Ring
		1x Talisman of Dominance
		1x Talisman of Indulgence

4.12 Doomsday Breya

Deck Link: <http://tappedout.net/mtg-decks/breya-ad-naus/>

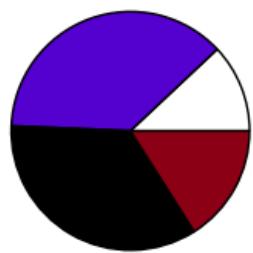
Discord Url: N/A

Author: mmcgeach (<https://tappedout.net/users/mmcgeach>)

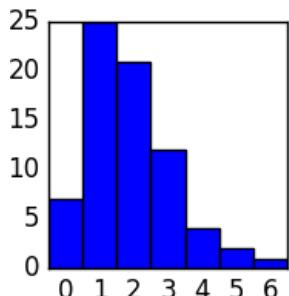
Commander(s): Breya, Etherium Shaper

Color: WUBR (W: 9 12.0% U: 28 37.3% B: 26 34.7% R: 12 16.0%)

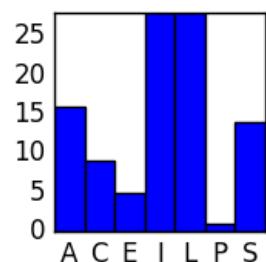
CMC: 1.88



(a) Mana Pie



(b) CMC Histogram



(c) Card Type Histogram

Figure 35: Doomsday Breya

Decklist: Doomsday Breya, Cockatrice Hash: 11gpe79q

Commander (1)	Instant (28)	Sorcery (14)
1x Breya, Etherium Shaper	1x Ad Nauseam 1x Brainstorm 1x Cabal Ritual 1x Chain of Vapor 1x Dark Ritual 1x Delay 1x Dispel 1x Enlightened Tutor 1x Entomb 1x Fire Covenant 1x Flusterstorm 1x Force of Will 1x Frantic Search 1x Izzet Charm 1x Lim-Dûl's Vault 1x Mana Drain 1x Mental Misstep 1x Mystical Tutor 1x Pact of Negation 1x Pull from Eternity 1x Pyroblast 1x Silence 1x Swan Song 1x Swords to Plowshares 1x Tainted Pact 1x Thought Scour 1x Vampiric Tutor 1x Wear // Tear	1x Deep Analysis 1x Demonic Tutor 1x Doomsday 1x Faithless Looting 1x Gamble 1x Gitaxian Probe 1x Imperial Seal 1x Merchant Scroll 1x Night's Whisper 1x Preordain 1x Toxic Deluge 1x Wheel of Fortune 1x Windfall 1x Yawgmoth's Will
Land (28)		Artifact (15)
1x Ancient Tomb 1x Arid Mesa 1x Badlands 1x Bazaar of Baghdad 1x Bloodstained Mire 1x Cavern of Souls 1x City of Brass 1x Command Tower 1x Darkslick Shores 1x Exotic Orchard 1x Flooded Strand 1x Forbidden Orchard 1x Gemstone Caverns 1x Gemstone Mine 1x Mana Confluence 1x Marsh Flats 1x Misty Rainforest 1x Plateau 1x Polluted Delta 1x Scalding Tarn 1x Scrubland 1x Tundra 1x Underground Sea 1x Urborg, Tomb of Yawgmoth 1x Verdant Catacombs 1x Volcanic Island 1x Windswept Heath 1x Wooded Foothills		1x Chrome Mox 1x Dimir Signet 1x Fellwar Stone 1x Izzet Signet 1x Lion's Eye Diamond 1x Lotus Petal 1x Mana Crypt 1x Mana Vault 1x Mox Diamond 1x Mox Opal 1x Sensei's Divining Top 1x Sol Ring 1x Talisman of Dominance 1x Talisman of Indulgence 1x Talisman of Progress
Enchantment (5)		Creature (8)
1x Animate Dead 1x Dance of the Dead 1x Mystic Remora 1x Necromancy 1x Necropotence		1x Auriok Salvagers 1x Dark Confidant 1x Grand Abolisher 1x Jace, Vryn's Prodigy 1x Laboratory Maniac 1x Notion Thief 1x Snapcaster Mage 1x Worldgorger Dragon
Planeswalker (1)	Dack Fayden	

4.13 Doomsday Yidris

Deck Link: <http://tappedout.net/mtg-decks/yidris-stormdoomsday-20/>

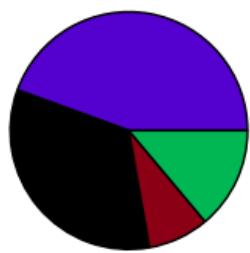
Discord Url: N/A

Author: LabManiac_Sigi (https://tappedout.net/users/LabManiac_Sigi)

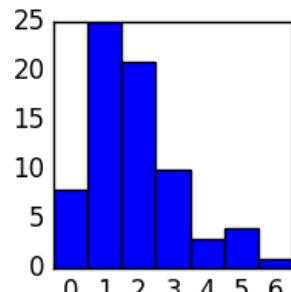
Commander(s): Yidris, Maelstrom Wielder

Color: UBRG (U: 32 44.4% B: 24 33.3% R: 6 8.3% G: 10 13.9%)

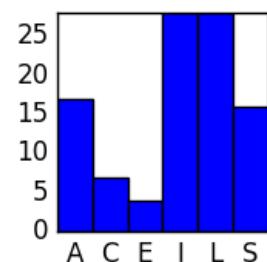
CMC: 1.88



(a) Mana Pie



(b) CMC Histogram



(c) Card Type Histogram

Figure 36: Doomsday Yidris

Decklist: Doomsday Yidris, Cockatrice Hash: u88v9dtp

Commander (1)	Instant (28)	Sorcery (16)
1x Yidris, Maelstrom Wielder	1x Abrupt Decay 1x Ad Nauseam 1x Brainstorm 1x Cabal Ritual 1x Chain of Vapor 1x Cyclonic Rift 1x Dark Ritual 1x Delay 1x Dramatic Reversal 1x Fire Covenant 1x Flusterstorm 1x Force of Will 1x Frantic Search 1x Gush 1x High Tide 1x Into the Roil 1x Intuition 1x Lim-Dûl's Vault 1x Mana Drain 1x Manamorphose 1x Mental Misstep 1x Mystical Tutor 1x Nature's Claim 1x Noxious Revival 1x Spell Pierce 1x Swan Song 1x Tainted Pact 1x Vampiric Tutor	1x Ancestral Vision 1x Dark Petition 1x Demonic Tutor 1x Doomsday 1x Gamble 1x Gitaxian Probe 1x Imperial Seal 1x Mind's Desire 1x Ponder 1x Preordain 1x Rolling Earthquake 1x Summer Bloom 1x Timetwister 1x Wheel of Fortune 1x Windfall 1x Yawgmoth's Will
Land (28)		
1x Ancient Tomb 1x Arid Mesa 1x Badlands 1x Bayou 1x Bloodstained Mire 1x Breeding Pool 1x City of Brass 1x Command Tower 1x Exotic Orchard 1x Flooded Strand 1x Forbidden Orchard 1x Island 1x Mana Confluence 1x Marsh Flats 1x Misty Rainforest 1x Polluted Delta 1x Scalding Tarn 1x Snow-Covered Island 1x Steam Vents 1x Tarnished Citadel 1x Tropical Island 1x Underground River 1x Underground Sea 1x Verdant Catacombs 1x Volcanic Island 1x Watery Grave 1x Windswept Heath 1x Wooded Foothills		
Enchantment (4)		
1x Carpet of Flowers 1x Mystic Remora 1x Necropotence 1x Sylvan Library	1x Baral, Chief of Compliance 1x Birds of Paradise 1x Dark Confidant 1x Deathrite Shaman 1x Laboratory Maniac 1x Notion Thief	1x Aetherflux Reservoir 1x Chrome Mox 1x Dimir Signet 1x Fellwar Stone 1x Helm of Awakening 1x Izzet Signet 1x Lion's Eye Diamond 1x Lotus Bloom 1x Lotus Petal 1x Mana Crypt 1x Mana Vault 1x Mox Diamond 1x Mox Opal 1x Sensei's Divining Top 1x Simic Signet 1x Sol Ring 1x Talisman of Dominance
Creature (6)		

4.14 Doomsday Zur

Deck Link: <https://tappedout.net/mtg-decks/12-05-17-AKL-zur-doomsday/>

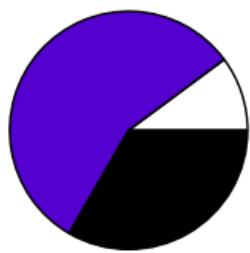
Discord Url: <https://discord.gg/3r8uheX>

Author: AlwaysSleepy (<https://tappedout.net/users/AlwaysSleepy>)

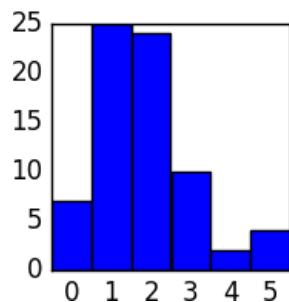
Commander(s): Zur the Enchanter

Color: WUB (W: 7 10.1% U: 39 56.5% B: 23 33.3%)

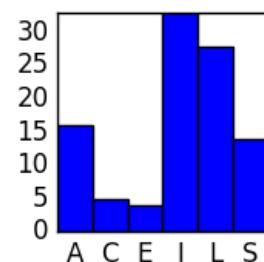
CMC: 1.82



(a) Mana Pie



(b) CMC Histogram



(c) Card Type Histogram

Figure 37: Doomsday Zur

Decklist: Doomsday Zur, Cockatrice Hash: bqscfpnb

Commander (1)	Instant (33)	Sorcery (14)
1x Zur the Enchanter	1x Ad Nauseam 1x Angel's Grace 1x Brainstorm 1x Cabal Ritual 1x Chain of Vapor 1x Counterspell 1x Cyclonic Rift 1x Dark Ritual 1x Delay 1x Demonic Consultation 1x Dispel 1x Dramatic Reversal 1x Enlightened Tutor 1x Flusterstorm 1x Force of Will 1x Frantic Search 1x Gush 1x High Tide 1x Impulse 1x Intuition 1x Lim-Dûl's Vault 1x Mana Drain 1x Mental Misstep 1x Mystical Tutor 1x Negate 1x Pact of Negation 1x Predict 1x Silence 1x Snap 1x Spell Pierce 1x Swan Song 1x Swords to Plowshares 1x Vampiric Tutor	1x Dark Petition 1x Demonic Tutor 1x Doomsday 1x Gitaxian Probe 1x Imperial Seal 1x Merchant Scroll 1x Night's Whisper 1x Ponder 1x Preordain 1x Sleight of Hand 1x Timetwister 1x Toxic Deluge 1x Windfall 1x Yawgmoth's Will
Land (28)		Artifact (16)
1x Ancient Tomb 1x Arid Mesa 1x Bloodstained Mire 1x City of Brass 1x Command Tower 1x Flooded Strand 1x Hallowed Fountain 8x Island 1x Mana Confluence 1x Marsh Flats 1x Misty Rainforest 1x Polluted Delta 1x Scalding Tarn 1x Scrubland 1x Swamp 1x Tundra 1x Underground Sea 1x Urborg, Tomb of Yawgmoth 1x Verdant Catacombs 1x Watery Grave 1x Windswept Heath		1x Azorius Signet 1x Chrome Mox 1x Dimir Signet 1x Fellwar Stone 1x Grim Monolith 1x Helm of Awakening 1x Lion's Eye Diamond 1x Lotus Petal 1x Mana Crypt 1x Mana Vault 1x Mox Diamond 1x Mox Opal 1x Sensei's Divining Top 1x Sol Ring 1x Talisman of Dominance 1x Talisman of Progress
Enchantment (4)		
1x Copy Artifact 1x Grasp of Fate 1x Mystic Remora 1x Necropotence		
Creature (4)		
1x Dark Confidant 1x Jace, Vryn's Prodigy 1x Laboratory Maniac 1x Notion Thief		

4.15 E-MAN

Deck Link: <https://tappedout.net/mtg-decks/e-man-1/>

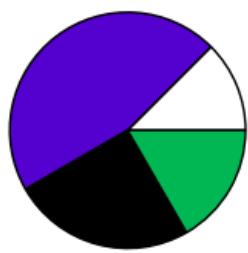
Discord Url: <https://discord.gg/9AwgYgs>

Author: biopouvoir (<https://tappedout.net/users/biopouvoir>)

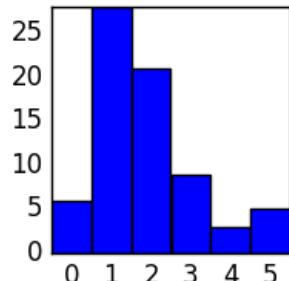
Commander(s): Thrasios, Triton Hero, Tymna the Weaver

Color: WUBG (W: 9 12.5% U: 33 45.8% B: 18 25.0% G: 12 16.7%)

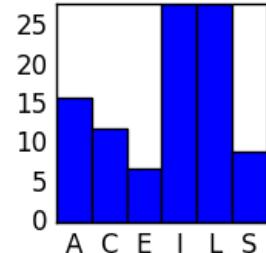
CMC: 1.86



(a) Mana Pie



(b) CMC Histogram



(c) Card Type Histogram

Figure 38: E-MAN

Decklist: E-MAN, Cockatrice Hash: qhquiqql

Commander (2)	Instant (28)	Enchantment (7)
1x Thrasios, Triton Hero	1x Abrupt Decay	1x Carpet of Flowers
1x Tymna the Weaver	1x Ad Nauseam	1x Copy Artifact
	1x Angel's Grace	1x Counterbalance
Land (28)	1x Assassin's Trophy	1x Mystic Remora
1x Ancient Tomb	1x Brainstorm	1x Rhystic Study
1x Arid Mesa	1x Chain of Vapor	1x Sylvan Library
1x Bayou	1x Cyclonic Rift	1x Training Grounds
1x Bloodstained Mire	1x Dark Ritual	
1x Breeding Pool	1x Delay	Sorcery (9)
1x City of Brass	1x Dispel	1x Demonic Tutor
1x Command Tower	1x Dramatic Reversal	1x Devastation Tide
1x Exotic Orchard	1x Enlightened Tutor	1x Grim Tutor
1x Flooded Strand	1x Flusterstorm	1x Imperial Seal
1x Forest	1x Force of Will	1x Ponder
1x Gemstone Caverns	1x Lim-Dûl's Vault	1x Praetor's Grasp
1x Hallowed Fountain	1x Mana Drain	1x Timetwister
1x Island	1x Mental Misstep	1x Toxic Deluge
1x Mana Confluence	1x Misdirection	1x Windfall
1x Marsh Flats	1x Mystical Tutor	
1x Misty Rainforest	1x Nature's Claim	Artifact (16)
1x Overgrown Tomb	1x Negate	1x Chrome Mox
1x Polluted Delta	1x Noxious Revival	1x Fellwar Stone
1x Savannah	1x Pact of Negation	1x Grafdigger's Cage
1x Scalding Tarn	1x Silence	1x Grim Monolith
1x Scrubland	1x Stifle	1x Isochron Scepter
1x Tropical Island	1x Swan Song	1x Mana Crypt
1x Tundra	1x Swords to Plowshares	1x Mana Vault
1x Underground Sea	1x Vampiric Tutor	1x Mox Amber
1x Verdant Catacombs		1x Mox Diamond
1x Watery Grave		1x Mox Opal
1x Windswept Heath		1x Paradox Engine
1x Wooded Foothills		1x Scroll Rack
		1x Sensei's Divining Top
		1x Sol Ring
		1x Talisman of Dominance
		1x Talisman of Progress
		Creature (10)
		1x Alms Collector
		1x Aven Mindcensor
		1x Birds of Paradise
		1x Dark Confidant
		1x Deathrite Shaman
		1x Gilded Drake
		1x Linvala, Keeper of Silence
		1x Noble Hierarch
		1x Notion Thief
		1x Runic Armasaur

4.16 Edric Turns

Deck Link: <http://tappedout.net/mtg-decks/a-song-of-turns-and-dongers-cedh/>

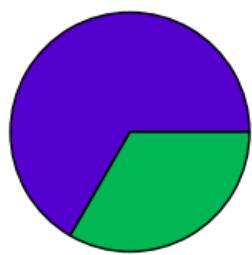
Discord Url: <https://discord.gg/XvASnbc>

Author: Allergymedsandcats (<https://tappedout.net/users/Allergymedsandcats>)

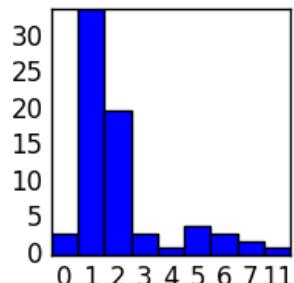
Commander(s): Edric, Spymaster of Trest

Color: UG (U: 54 66.7% G: 27 33.3%)

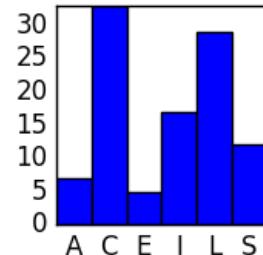
CMC: 2.11



(a) Mana Pie



(b) CMC Histogram



(c) Card Type Histogram

Figure 39: Edric Turns

Decklist: Edric Turns, Cockatrice Hash: drq90ajt

Commander (1)	Instant (17)	Creature (31)
1x Edric, Spymaster of Trest	1x Counterspell 1x Crop Rotation 1x Cyclonic Rift 1x Delay 1x Dispel 1x Flusterstorm 1x Force of Will 1x Mana Drain 1x Mental Misstep 1x Mystical Tutor 1x Nature's Claim 1x Negate 1x Nexus of Fate 1x Noxious Revival 1x Reclaim 1x Spell Pierce 1x Unified Will	1x Arbor Elf 1x Baral, Chief of Compliance 1x Boreal Druid 1x Caustic Caterpillar 1x Cloud of Faeries 1x Eladamri, Lord of Leaves 1x Elvish Mystic 1x Eternal Witness 1x Faerie Miscreant 1x Fyndhorn Elves 1x Gudul Lurker 1x Hope of Ghirapur 1x Llanowar Elves 1x Lootet il-Kor 1x Mausoleum Wanderer 1x Mist-Cloaked Herald 1x Nightveil Sprite 1x Phantasmal Image 1x Phyrexian Revoker 1x Priest of Titania 1x Scryb Sprites 1x Siren Stormtamer 1x Slither Blade 1x Snapcaster Mage 1x Spellstutter Sprite 1x Spire Tracer 1x Sylvan Safekeeper 1x Tetsuko Umezawa, Fugitive 1x Treetop Scout 1x Triton Shorestalker 1x Wingcrafter
Land (29)	Sorcery (12)	
1x Breeding Pool 1x Cavern of Souls 1x City of Brass 1x Command Tower 1x Dryad Arbor 1x Flooded Grove 1x Flooded Strand 3x Forest 1x Gaea's Cradle 1x Hinterland Harbor 6x Island 1x Mana Confluence 1x Misty Rainforest 1x Nykthos, Shrine to Nyx 1x Polluted Delta 1x Reflecting Pool 1x Scalding Tarn 1x Tropical Island 1x Verdant Catacombs 1x Windswept Heath 1x Wooded Foothills 1x Yavimaya Coast	1x Capture of Jingzhou 1x Green Sun's Zenith 1x Karn's Temporal Sundering 1x Notorious Throng 1x Part the Waterveil 1x Personal Tutor 1x Regrowth 1x Temporal Manipulation 1x Temporal Mastery 1x Temporal Trespass 1x Time Warp 1x Walk the Aeons	
Enchantment (5)		
1x Carpet of Flowers 1x Druids' Repository 1x Exploration 1x Mystic Remora 1x Sylvan Library		
Artifact (5)		
1x Chrome Mox 1x Mana Crypt 1x Mox Diamond 1x Null Rod 1x Sol Ring		

4.17 Food Chain Prossh

Deck Link: <https://tappedout.net/mtg-decks/19-07-16-food-chain-prossh/>

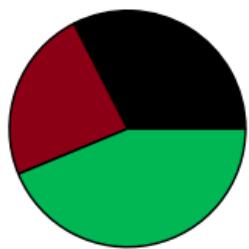
Discord Url: <https://discord.gg/xFPmD2E>

Author: angelforge (<https://tappedout.net/users/angelforge>)

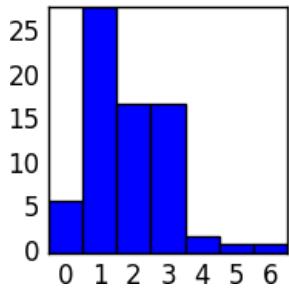
Commander(s): Prossh, Skyraider of Kher

Color: BRG (B: 26 32.5% R: 19 23.8% G: 35 43.8%)

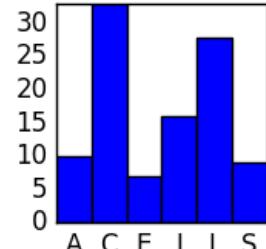
CMC: 1.83



(a) Mana Pie



(b) CMC Histogram



(c) Card Type Histogram

Figure 40: Food Chain Prossh

Decklist: Food Chain Prossh, Cockatrice Hash: gsmck2hr

Commander (1)	Instant (16)	Artifact (9)
1x Prossh, Skyraider of Kher	1x Abrupt Decay 1x Ad Nauseam 1x Autumn's Veil 1x Dark Ritual 1x Demonic Consultation 1x Final Fortune 1x Fire Covenant 1x Guttural Response 1x Nature's Claim 1x Noxious Revival 1x Plunge into Darkness 1x Pyroblast 1x Red Elemental Blast 1x Summoner's Pact 1x Tainted Pact 1x Vampiric Tutor	1x Chrome Mox 1x Defense Grid 1x Lotus Petal 1x Mana Crypt 1x Mana Vault 1x Mox Diamond 1x Sensei's Divining Top 1x Skullclamp 1x Sol Ring
Land (28)		Creature (31)
1x Arid Mesa 1x Badlands 1x Bayou 1x Blood Crypt 1x Bloodstained Mire 1x Cavern of Souls 1x City of Brass 1x Command Tower 1x Dryad Arbor 1x Forbidden Orchard 1x Forest 1x Gaea's Cradle 1x Mana Confluence 1x Marsh Flats 1x Misty Rainforest 1x Overgrown Tomb 1x Polluted Delta 1x Scalding Tarn 1x Snow-Covered Forest 1x Snow-Covered Swamp 1x Stomping Ground 1x Swamp 1x Taiga 1x Tarnished Citadel 1x Urborg, Tomb of Yawgmoth 1x Verdant Catacombs 1x Windswept Heath 1x Wooded Foothills	1x Arbor Elf 1x Birds of Paradise 1x Blood Artist 1x Boreal Druid 1x Dark Confidant 1x Deathrite Shaman 1x Elves of Deep Shadow 1x Elvish Mystic 1x Elvish Spirit Guide 1x Eternal Witness 1x Fyndhorn Elves 1x Genesis Hydra 1x Goblin Bushwhacker 1x Goblin Matron 1x Imperial Recruiter 1x Llanowar Elves 1x Orcish Lumberjack 1x Purphoros, God of the Forge 1x Reckless Bushwhacker 1x Riftsweeper 1x Selvala, Heart of the Wilds 1x Simian Spirit Guide 1x Smothering Abomination 1x Squee, the Immortal 1x Sylvan Ranger 1x Vexing Shusher 1x Walking Ballista 1x Wall of Roots 1x Wood Elves 1x Xantid Swarm 1x Zulaport Cutthroat	
	Enchantment (6)	
	1x Carpet of Flowers 1x City of Solitude 1x Food Chain 1x Mirri's Guile 1x Necropotence 1x Sylvan Library	
	Sorcery (9)	
	1x Demonic Tutor 1x Diabolic Intent 1x Dimir Machinations 1x Green Sun's Zenith 1x Grim Tutor 1x Imperial Seal 1x Regrowth 1x Wheel of Fortune 1x Yawgmoth's Will	

4.18 Food Chain Tazri

Deck Link: <http://tappedout.net/mtg-decks/food-chain-tazri/>

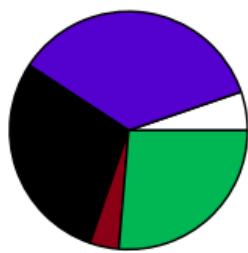
Discord Url: <https://discord.gg/B8XPcEz>

Author: ShaperSavant (<https://tappedout.net/users/ShaperSavant>)

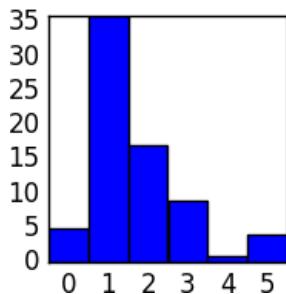
Commander(s): General Tazri

Color: WUBRG (W: 4 5.3% U: 27 35.5% B: 22 28.9% R: 3 3.9% G: 20 26.3%)

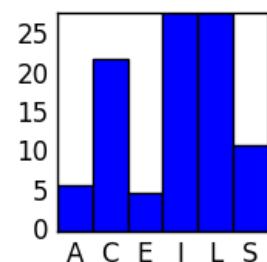
CMC: 1.68



(a) Mana Pie



(b) CMC Histogram



(c) Card Type Histogram

Figure 41: Food Chain Tazri

Decklist: Food Chain Tazri, Cockatrice Hash: 49ko60o7

Commander (1)	Instant (28)	Sorcery (11)
1x General Tazri	1x Abrupt Decay 1x Ad Nauseam 1x Assassin's Trophy 1x Brainstorm 1x Chain of Vapor 1x Dark Ritual 1x Delay 1x Demonic Consultation 1x Dispel 1x Enlightened Tutor 1x Entomb 1x Fire Covenant 1x Flusterstorm 1x Force of Will 1x Lim-Dûl's Vault 1x Mana Drain 1x Mental Misstep 1x Mystical Tutor 1x Nature's Claim 1x Noxious Revival 1x Pact of Negation 1x Plunge into Darkness 1x Silence 1x Spell Pierce 1x Swan Song 1x Swords to Plowshares 1x Tainted Pact 1x Vampiric Tutor	1x Demonic Tutor 1x Extract 1x Foresight 1x Gitaxian Probe 1x Imperial Seal 1x Manipulate Fate 1x Ponder 1x Preordain 1x Regrowth 1x Timetwister 1x Yawgmoth's Will
Land (28)		Creature (21)
1x Bayou 1x Bloodstained Mire 1x Breeding Pool 1x City of Brass 1x Command Tower 1x Exotic Orchard 1x Flooded Strand 1x Forbidden Orchard 1x Forest 1x Gemstone Caverns 1x Gemstone Mine 1x Llanowar Wastes 1x Mana Confluence 1x Marsh Flats 1x Misty Rainforest 1x Overgrown Tomb 1x Polluted Delta 1x Savannah 1x Scalding Tarn 1x Tarnished Citadel 1x Tropical Island 1x Tundra 1x Underground Sea 1x Verdant Catacombs 1x Watery Grave 1x Windswept Heath 1x Wooded Foothills 1x Yavimaya Coast	1x Arbor Elf 1x Avacyn's Pilgrim 1x Birds of Paradise 1x Boreal Druid 1x Dark Confidant 1x Deathrite Shaman 1x Elves of Deep Shadow 1x Elvish Mystic 1x Elvish Spirit Guide 1x Eternal Scourge 1x Fyndhorn Elves 1x Gilded Drake 1x Hagra Diabolist 1x Halimar Excavator 1x Kalastria Healer 1x Laboratory Maniac 1x Llanowar Elves 1x Misthollow Griffin 1x Noble Hierarch 1x Squee, the Immortal 1x Wall of Roots	
Enchantment (5)	1x Carpet of Flowers 1x Food Chain 1x Mystic Remora 1x Necropotence 1x Sylvan Library	Artifact (6) 1x Chrome Mox 1x Lotus Petal 1x Mana Crypt 1x Mana Vault 1x Mox Diamond 1x Sol Ring

4.19 Gitrog Dredge

Deck Link: <https://tappedout.net/mtg-decks/gitrog-land-combo/>

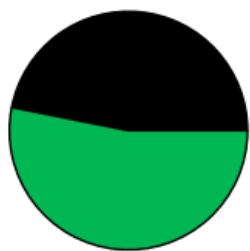
Discord Url: <https://discord.gg/2juKBHS>

Author: Leptys (<https://tappedout.net/users/Leptys>)

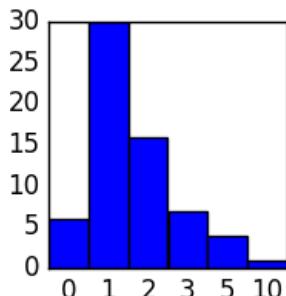
Commander(s): The Gitrog Monster

Color: BG (B: 30 46.9% G: 34 53.1%)

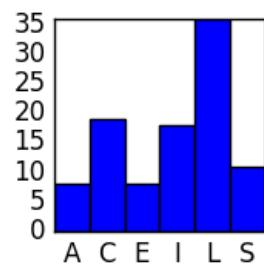
CMC: 1.77



(a) Mana Pie



(b) CMC Histogram



(c) Card Type Histogram

Figure 42: Gitrog Dredge

Decklist: Gitrog Dredge, Cockatrice Hash: qdra2p1g

Commander (1)	Land (36)	Sorcery (11)
1x The Gitrog Monster	1x Ancient Tomb 1x Barren Moor 1x Bayou 1x Bazaar of Baghdad 1x Blasted Landscape 1x Bloodstained Mire 1x Blooming Marsh 1x Cabal Pit 1x Cavern of Souls 1x City of Brass 1x City of Traitors 1x Command Beacon 1x Command Tower 1x Dakmor Salvage 1x Forbidden Orchard 2x Forest 1x Gaea's Cradle 1x Gemstone Caverns 1x Homeward Path 1x Lake of the Dead 1x Llanowar Wastes 1x Mana Confluence 1x Marsh Flats 1x Misty Rainforest 1x Overgrown Tomb 1x Petrified Field 1x Phyrexian Tower 1x Polluted Delta 1x Strip Mine 2x Swamp 1x Twilight Mire 1x Verdant Catacombs 1x Windswept Heath 1x Wooded Foothills	1x Demonic Tutor 1x Diabolic Intent 1x Duress 1x Gaea's Blessing 1x Green Sun's Zenith 1x Imperial Seal 1x Life from the Loam 1x Praetor's Grasp 1x Sylvan Tutor 1x Thoughtseize 1x Toxic Deluge
Instant (18)		Artifact (8)
1x Abrupt Decay 1x Ad Nauseam 1x Assassin's Trophy 1x Autumn's Veil 1x Beast Within 1x Cabal Ritual 1x Crop Rotation 1x Culling the Weak 1x Dark Ritual 1x Darkblast 1x Entomb 1x Nature's Claim 1x Noxious Revival 1x Rain of Filth 1x Savage Summoning 1x Summoner's Pact 1x Vampiric Tutor 1x Worldly Tutor		1x Chrome Mox 1x Grim Monolith 1x Lion's Eye Diamond 1x Lotus Petal 1x Mana Crypt 1x Mana Vault 1x Mox Diamond 1x Sol Ring
Enchantment (8)		Creature (18)
1x Carpet of Flowers 1x Exploration 1x Necropotence 1x Oblivion Crown 1x Pernicious Deed 1x Squandered Resources 1x Sylvan Library 1x Wild Growth		1x Birds of Paradise 1x Caustic Caterpillar 1x Dark Confidant 1x Deathrite Shaman 1x Elves of Deep Shadow 1x Elvish Spirit Guide 1x Fyndhorn Elves 1x Golgari Grave-Troll 1x Kozilek, Butcher of Truth 1x Llanowar Elves 1x Noose Constrictor 1x Priest of Titania 1x Putrid Imp 1x Ramunap Excavator 1x Riftsweeper 1x Skirge Familiar 1x Sylvan Safekeeper 1x Wall of Roots

4.20 Godo Helm

Deck Link: <https://tappedout.net/mtg-decks/waiting-for-godo-cedh-primer/>

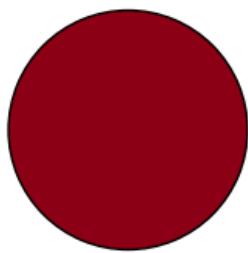
Discord Url: <https://discord.gg/HWf2VWJ>

Author: gtoast99 (<https://tappedout.net/users/gtoast99>)

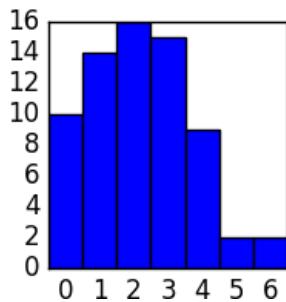
Commander(s): Godo, Bandit Warlord

Color: R (R: 36 100.0%)

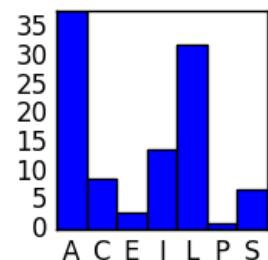
CMC: 2.19



(a) Mana Pie



(b) CMC Histogram



(c) Card Type Histogram

Figure 43: Godo Helm

Decklist: Godo Helm, Cockatrice Hash: ncoku29h

Commander (1)	Sorcery (7)	Artifact (34)
1x Godo, Bandit Warlord	1x Gamble 1x Heat Shimmer 1x Last Chance 1x Rite of Flame 1x Shattering Spree 1x Twinflame 1x Wheel of Fortune	1x Argentum Armor 1x Basalt Monolith 1x Chalice of the Void 1x Chrome Mox 1x Codex Shredder 1x Cursed Totem 1x Defense Grid 1x Everflowing Chalice 1x Expedition Map 1x Fellwar Stone 1x Fractured Powerstone 1x Grafdigger's Cage 1x Grim Monolith 1x Hammer of Nazahn 1x Helm of the Host 1x Honor-Worn Shaku 1x Jeweled Amulet 1x Krark-Clan Ironworks 1x Lion's Eye Diamond 1x Lotus Petal 1x Mana Crypt 1x Mana Vault 1x Mind Stone 1x Mox Diamond 1x Mox Opal 1x Panharmonicon 1x Paradox Engine 1x Prismatic Lens 1x Sol Ring 1x Thought Vessel 1x Thran Dynamo 1x Voltaic Key 1x Welding Jar 1x Worn Powerstone
Land (32)	Creature (8)	
1x Ancient Tomb 1x Buried Ruin 1x Cavern of Souls 1x City of Traitors 1x Crystal Vein 1x Darksteel Citadel 1x Dwarven Ruins 1x Gemstone Caverns 1x Great Furnace 1x Inventors' Fair 19x Mountain 1x Rishadan Port 1x Sandstone Needle 1x Sequestered Stash	1x Brass Squire 1x Dire Fleet Daredevil 1x Goblin Welder 1x Imperial Recruiter 1x Magus of the Moon 1x Metalworker 1x Simian Spirit Guide 1x Treasonous Ogre	
Instant (14)		
1x Abrade 1x Chaos Warp 1x Desperate Ritual 1x Final Fortune 1x Fork 1x Lightning Bolt 1x Magnetic Theft 1x Mogg Salvage 1x Pyretic Ritual 1x Pyroblast 1x Red Elemental Blast 1x Ricochet Trap 1x Seething Song 1x Thunderclap		
Enchantment (3)		
1x Blood Moon 1x Possibility Storm 1x Stranglehold		
Planeswalker (1)		
1x Daretti, Scrap Savant		

4.21 Grixis Consultation

Deck Link: <http://tappedout.net/mtg-decks/consultation-kess-a-primer/>

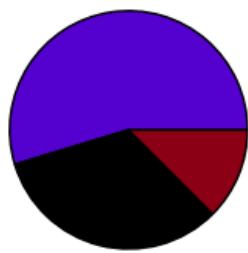
Discord Url: <https://discord.gg/NeP6sAs>

Author: IIITheJManIII (<https://tappedout.net/users/IIITheJManIII>)

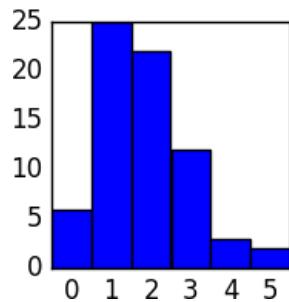
Commander(s): Kess, Dissident Mage

Color: UBR (U: 35 54.7% B: 21 32.8% R: 8 12.5%)

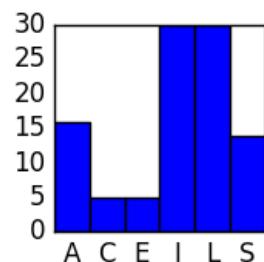
CMC: 1.81



(a) Mana Pie



(b) CMC Histogram



(c) Card Type Histogram

Figure 44: Grixis Consultation

Decklist: Grixus Consultation, Cockatrice Hash: sua18t71

Commander (1)	Instant (30)	Enchantment (5)
1x Kess, Dissident Mage	1x Abrade 1x Ad Nauseam 1x Brainstorm 1x Cabal Ritual 1x Chain of Vapor 1x Counterspell 1x Cyclonic Rift 1x Dark Ritual 1x Delay 1x Demonic Consultation 1x Dispel 1x Dramatic Reversal 1x Flusterstorm 1x Force of Will 1x Frantic Search 1x Impulse 1x Intuition 1x Lim-Dûl's Vault 1x Mana Drain 1x Mental Misstep 1x Mystical Tutor 1x Negate 1x Pact of Negation 1x Pyroblast 1x Rebuild 1x Red Elemental Blast 1x Spell Pierce 1x Swan Song 1x Tainted Pact 1x Vampiric Tutor	1x Copy Artifact 1x Mystic Remora 1x Necropotence 1x Rhystic Study 1x Stranglehold
Land (30)		
1x Ancient Tomb		
1x Arid Mesa		
1x Badlands		
1x Blood Crypt		
1x Bloodstained Mire		
1x Cephalid Coliseum		
1x City of Brass		
1x Command Tower		
1x Exotic Orchard		
1x Flooded Strand		
1x Forbidden Orchard		
1x Gemstone Caverns		
1x Island		
1x Mana Confluence		
1x Marsh Flats		
1x Misty Rainforest		
1x Morphic Pool		
1x Polluted Delta		
1x Scalding Tarn		
1x Snow-Covered Island		
1x Steam Vents		
1x Sunken Ruins		
1x Swamp		
1x Tarnished Citadel		
1x Underground River		
1x Underground Sea		
1x Verdant Catacombs		
1x Volcanic Island		
1x Watery Grave		
1x Wooded Foothills		
	Creature (4)	
	1x Dark Confidant 1x Jace, Vryn's Prodigy 1x Laboratory Maniac 1x Notion Thief	
		Sorcery (14)
		1x Demonic Tutor 1x Gamble 1x Gitaxian Probe 1x Imperial Seal 1x Ponder 1x Praetor's Grasp 1x Preordain 1x Reanimate 1x Rolling Earthquake 1x Timetwister 1x Toxic Deluge 1x Wheel of Fortune 1x Windfall 1x Yawgmoth's Will
		Artifact (16)
		1x Chrome Mox 1x Cursed Totem 1x Dimir Signet 1x Fellwar Stone 1x Grim Monolith 1x Isochron Scepter 1x Izzet Signet 1x Lotus Petal 1x Mana Crypt 1x Mana Vault 1x Mox Diamond 1x Mox Opal 1x Sensei's Divining Top 1x Silent Gravestone 1x Sol Ring 1x Talisman of Dominance

4.22 Grixis Twin

Deck Link: <https://tappedout.net/mtg-decks/17-09-16-grixis-twin/>

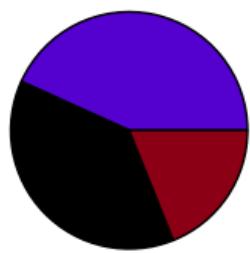
Discord Url: <https://discord.gg/QtSQaA5>

Author: infiniteimoc (<https://tappedout.net/users/infiniteimoc>)

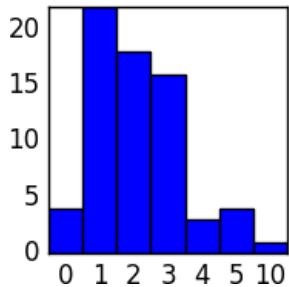
Commander(s): Kess, Dissident Mage

Color: UBR (U: 32 43.2% B: 28 37.8% R: 14 18.9%)

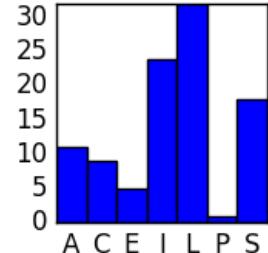
CMC: 2.18



(a) Mana Pie



(b) CMC Histogram



(c) Card Type Histogram

Figure 45: Grixis Twin

Decklist: Grixis Twin, Cockatrice Hash: 5h5t0nks

Commander (1)	Instant (24)	Sorcery (18)
1x Kess, Dissident Mage	1x Brainstorm 1x Cabal Ritual 1x Chain of Vapor 1x Counterspell 1x Cyclonic Rift 1x Dark Ritual 1x Demonic Consultation 1x Dispel 1x Entomb 1x Fire Covenant 1x Force of Will 1x Frantic Search 1x Intuition 1x Izzet Charm 1x Lim-Dûl's Vault 1x Mana Drain 1x Mental Misstep 1x Mystical Tutor 1x Pact of Negation 1x Pyroblast 1x Red Elemental Blast 1x Swan Song 1x Tainted Pact 1x Vampiric Tutor	1x Buried Alive 1x Chart a Course 1x Dark Petition 1x Demonic Tutor 1x Exhume 1x Faithless Looting 1x Gamble 1x Gitaxian Probe 1x Imperial Seal 1x Ponder 1x Preordain 1x Reanimate 1x Timetwister 1x Toxic Deluge 1x Victimize 1x Wheel of Fortune 1x Windfall 1x Yawgmoth's Will
Land (32)		
1x Ancient Tomb 1x Arid Mesa 1x Badlands 1x Blood Crypt 1x Bloodstained Mire 1x Cascade Bluffs 1x Cephalid Coliseum 1x City of Brass 1x Command Tower 1x Exotic Orchard 1x Flooded Strand 1x Forbidden Orchard 1x Graven Cairns 1x Island 1x Luxury Suite 1x Mana Confluence 1x Marsh Flats 1x Misty Rainforest 1x Morphic Pool 1x Polluted Delta 1x Scalding Tarn 1x Shivan Reef 1x Steam Vents 1x Sunken Ruins 1x Swamp 1x Tarnished Citadel 1x Underground River 1x Underground Sea 1x Verdant Catacombs 1x Volcanic Island 1x Watery Grave 1x Wooded Foothills		
Planeswalker (1)		
1x Dack Fayden		
Enchantment (5)		
	1x Animate Dead 1x Mystic Remora 1x Necromancy 1x Necropotence 1x Splinter Twin	
Artifact (11)		
		1x Chrome Mox 1x Dimir Signet 1x Fellwar Stone 1x Grim Monolith 1x Izzet Signet 1x Mana Crypt 1x Mana Vault 1x Mox Diamond 1x Sol Ring 1x Talisman of Dominance 1x Talisman of Indulgence
Creature (8)		
		1x Dark Confidant 1x Deceiver Exarch 1x Jin-Gitaxias, Core Augur 1x Kiki-Jiki, Mirror Breaker 1x Laboratory Maniac 1x Notion Thief 1x Pestermite 1x Phyrexian Delver

4.23 HE-MAN

Deck Link: <https://tappedout.net/mtg-decks/the-holy-trinity-of-hate-99-casual-copy/>

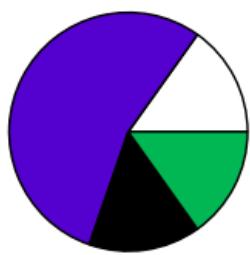
Discord Url: <https://discord.gg/9AwgYgs>

Author: LabManiac_Luke (https://tappedout.net/users/LabManiac_Luke)

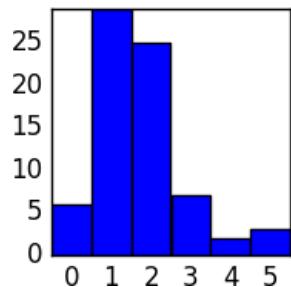
Commander(s): Thrasios, Triton Hero, Tymna the Weaver

Color: WUBG (W: 10 15.2% U: 36 54.5% B: 10 15.2% G: 10 15.2%)

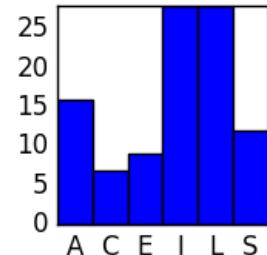
CMC: 1.71



(a) Mana Pie



(b) CMC Histogram



(c) Card Type Histogram

Figure 46: HE-MAN

Decklist: HE-MAN, Cockatrice Hash: 4bi0rbuq

Commander (2)	Instant (28)	Enchantment (9)
1x Thrasios, Triton Hero	1x Ad Nauseam	1x Blind Obedience
1x Tymna the Weaver	1x Angel's Grace	1x Carpet of Flowers
	1x Brainstorm	1x Copy Artifact
Land (28)	1x Chain of Vapor	1x Humility
1x Adarkar Wastes	1x Cyclonic Rift	1x Mystic Remora
1x Arid Mesa	1x Delay	1x Rest in Peace
1x Bayou	1x Dispel	1x Rhystic Study
1x Bloodstained Mire	1x Dramatic Reversal	1x Sylvan Library
1x Breeding Pool	1x Enlightened Tutor	1x Wild Growth
1x City of Brass	1x Flusterstorm	
1x Command Tower	1x Force of Will	Sorcery (12)
1x Exotic Orchard	1x Impulse	1x Demonic Tutor
1x Flooded Strand	1x Lim-Dûl's Vault	1x Imperial Seal
1x Forest	1x Mana Drain	1x Merchant Scroll
1x Hallowed Fountain	1x Mental Misstep	1x Night's Whisper
3x Island	1x Mystical Tutor	1x Ponder
1x Mana Confluence	1x Natural State	1x Preordain
1x Marsh Flats	1x Nature's Claim	1x Regrowth
1x Misty Rainforest	1x Negate	1x Sleight of Hand
1x Polluted Delta	1x Noxious Revival	1x Timetwister
1x Savannah	1x Opt	1x Toxic Deluge
1x Scalding Tarn	1x Pact of Negation	1x Transmute Artifact
1x Scrubland	1x Silence	1x Windfall
1x Tropical Island	1x Swan Song	
1x Tundra	1x Swords to Plowshares	Artifact (16)
1x Underground River	1x Vampiric Tutor	1x Chrome Mox
1x Underground Sea	1x Whir of Invention	1x Cursed Totem
1x Verdant Catacombs	1x Winds of Rebuke	1x Fellwar Stone
1x Watery Grave		1x Grafdigger's Cage
1x Windswept Heath		1x Grim Monolith
		1x Isochron Scepter
Creature (5)		1x Mana Crypt
1x Aven Mindcensor		1x Mana Vault
1x Birds of Paradise		1x Mox Amber
1x Gilded Drake		1x Mox Diamond
1x Noble Hierarch		1x Mox Opal
1x Notion Thief		1x Paradox Engine
		1x Sensei's Divining Top
		1x Sol Ring
		1x Talisman of Dominance
		1x Talisman of Progress

4.24 Harvest Animar

Deck Link: <https://tappedout.net/mtg-decks/harvest-animar/>

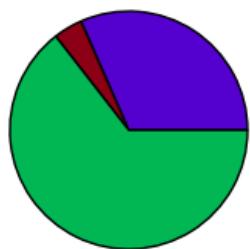
Discord Url: <https://discord.gg/BXgec3K>

Author: ShaperSavant (<https://tappedout.net/users/ShaperSavant>)

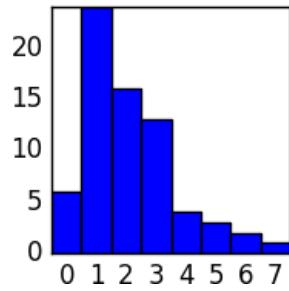
Commander(s): Animar, Soul of Elements

Color: URG (U: 24 31.6% R: 3 3.9% G: 49 64.5%)

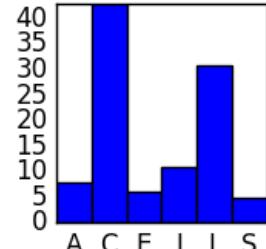
CMC: 2.10



(a) Mana Pie



(b) CMC Histogram



(c) Card Type Histogram

Figure 47: Harvest Animar

Decklist: Harvest Animar, Cockatrice Hash: 7lljrq7d

Commander (1)	Instant (11)	Creature (42)
1x Animar, Soul of Elements	1x Ancient Animus 1x Brainstorm 1x Chord of Calling 1x Crop Rotation 1x Dispel 1x Flusterstorm 1x Mental Misstep 1x Mystical Tutor 1x Pact of Negation 1x Swan Song 1x Worldly Tutor	1x Ancestral Statue 1x Arbor Elf 1x Bane of Progress 1x Beast Whisperer 1x Beastcaller Savant 1x Birds of Paradise 1x Bloom Tender 1x Bond Beetle 1x Cloud of Faeries 1x Consecrated Sphinx 1x Elvish Mystic 1x Elvish Spirit Guide 1x Elvish Visionary 1x Eternal Witness 1x Fauna Shaman 1x Fyndhorn Elves 1x Gaea's Herald 1x Generous Patron 1x Gilded Drake 1x Imperial Recruiter 1x Kiri-Onna 1x Llanowar Elves 1x Loyal Drake 1x Mulldrifter 1x Peregrine Drake 1x Phantasmal Image 1x Phyrexian Metamorph 1x Priest of Titania 1x Prowling Serpopard 1x Rishkar, Peema Renegade 1x Runic Armasaur 1x Siren Stormtamer 1x Slithermuse 1x Spellseeker 1x Spellsrite 1x Sylvan Safekeeper 1x Tishana, Voice of Thunder 1x Walking Ballista 1x Wall of Blossoms 1x Wall of Roots 1x Wild Cantor 1x Wood Elves
Land (31)		
1x Ancient Ziggurat 1x Arid Mesa 1x Bloodstained Mire 1x Botanical Sanctum 1x Breeding Pool 1x City of Brass 1x Command Tower 1x Exotic Orchard 1x Flooded Strand 1x Forbidden Orchard 1x Gaea's Cradle 1x Grove of the Burnwillows 1x Mana Confluence 1x Misty Rainforest 1x Polluted Delta 1x Reflecting Pool 1x Scalding Tarn 1x Snow-Covered Forest 1x Snow-Covered Island 1x Spire Garden 1x Steam Vents 1x Stomping Ground 1x Taiga 1x Tarnished Citadel 1x Thran Quarry 1x Tropical Island 1x Verdant Catacombs 1x Volcanic Island 1x Windswept Heath 1x Wooded Foothills 1x Yavimaya Coast		
	Enchantment (6)	
	1x Carpet of Flowers 1x Mystic Remora 1x Survival of the Fittest 1x Sylvan Library 1x Utopia Sprawl 1x Wild Growth	
	Sorcery (5)	
	1x Eldritch Evolution 1x Gitaxian Probe 1x Glimpse of Nature 1x Sylvan Tutor 1x Weird Harvest	
	Artifact (4)	
	1x Chrome Mox 1x Lotus Petal 1x Mana Crypt 1x Mox Diamond	

4.25 High Tide Jace

Deck Link: <https://tappedout.net/mtg-decks/03-04-16-high-tide/>

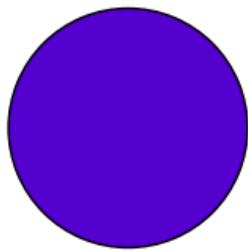
Discord Url: <https://discord.gg/VhwSnyY>

Author: ShaperSavant (<https://tappedout.net/users/ShaperSavant>)

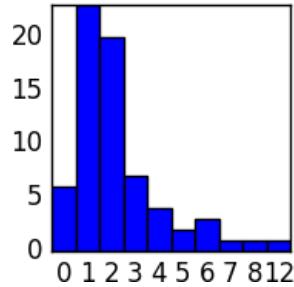
Commander(s): Jace, Vrynn's Prodigy

Color: U (U: 71 100.0%)

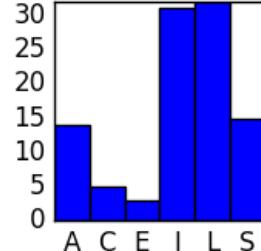
CMC: 2.28



(a) Mana Pie



(b) CMC Histogram



(c) Card Type Histogram

Figure 48: High Tide Jace

Decklist: High Tide Jace, Cockatrice Hash: 77ncl0g6

Commander (1)	Instant (31)	Artifact (14)
1x Jace, Vryn's Prodigy	1x Blue Sun's Zenith 1x Brainstorm 1x Chain of Vapor 1x Counterspell 1x Cyclonic Rift 1x Delay 1x Dig Through Time 1x Dispel 1x Dramatic Reversal 1x Fact or Fiction 1x Flusterstorm 1x Force of Will 1x Frantic Search 1x High Tide 1x Impulse 1x Intuition 1x Mana Drain 1x Mental Misstep 1x Muddle the Mixture 1x Mystical Tutor 1x Negate 1x Obsessive Search 1x Opt 1x Pact of Negation 1x Pongify 1x Pull from Tomorrow 1x Snap 1x Spell Pierce 1x Submerge 1x Swan Song 1x Turnabout	1x Aetherflux Reservoir 1x Candelabra of Tawnos 1x Chrome Mox 1x Fellwar Stone 1x Grim Monolith 1x Isochron Scepter 1x Lotus Petal 1x Mana Crypt 1x Mana Vault 1x Mox Diamond 1x Mox Opal 1x Sapphire Medallion 1x Sensei's Divining Top 1x Sol Ring
Land (32)		
1x Ancient Tomb 1x Flooded Strand 27x Island 1x Misty Rainforest 1x Polluted Delta 1x Scalding Tarn		
Enchantment (3)		
1x Copy Artifact 1x Mystic Remora 1x Rhystic Study		
Sorcery (15)		
1x Diminishing Returns 1x Enter the Infinite 1x Gitaxian Probe 1x Merchant Scroll 1x Mind's Desire 1x Personal Tutor 1x Ponder 1x Preordain 1x Recurring Insight 1x Serum Visions 1x Sleight of Hand 1x Time Spiral 1x Timetwister 1x Transmute Artifact 1x Windfall		
Creature (4)		
1x Baral, Chief of Compliance 1x Gilded Drake 1x Palinchron 1x Spellseeker		

4.26 Honorbru Meren

Deck Link: <https://tappedout.net/mtg-decks/honorbru-meren-finite-hulk/>

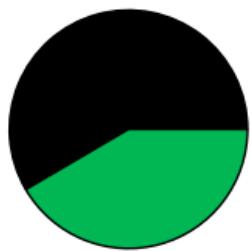
Discord Url: <https://discord.gg/HmVqsSU>

Author: roguelikedev (<https://tappedout.net/users/roguelikedev>)

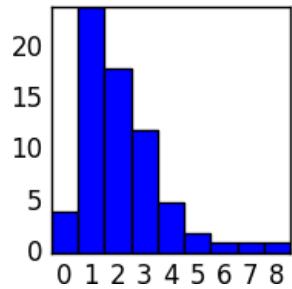
Commander(s): Meren of Clan Nel Toth

Color: BG (B: 45 58.4% G: 32 41.6%)

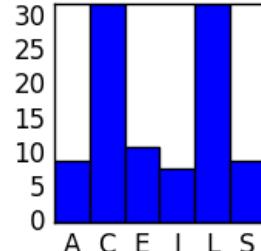
CMC: 2.16



(a) Mana Pie



(b) CMC Histogram



(c) Card Type Histogram

Figure 49: Honorbru Meren

Decklist: Honorbru Meren, Cockatrice Hash: aohgqs9s

Commander (1)	Instant (8)	Artifact (9)
1x Meren of Clan Nel Toth	1x Abrupt Decay 1x Assassin's Trophy 1x Crop Rotation 1x Entomb 1x Nature's Claim 1x Noxious Revival 1x Vampiric Tutor 1x Worldly Tutor	1x Birthing Pod 1x Chrome Mox 1x Lion's Eye Diamond 1x Mana Crypt 1x Mox Diamond 1x Null Rod 1x Skullclamp 1x Sol Ring 1x Trinisphere
Land (32)	Enchantment (11)	Creature (30)
1x Ancient Tomb 1x Bayou 1x Bloodstained Mire 1x Blooming Marsh 1x Bojuka Bog 1x Cavern of Souls 1x City of Brass 1x Command Tower 1x Dryad Arbor 4x Forest 1x Gaea's Cradle 1x High Market 1x Llanowar Wastes 1x Mana Confluence 1x Marsh Flats 1x Misty Rainforest 1x Overgrown Tomb 1x Phyrexian Tower 1x Polluted Delta 1x Snow-Covered Forest 1x Snow-Covered Swamp 2x Swamp 1x Twilight Mire 1x Urborg, Tomb of Yawgmoth 1x Verdant Catacombs 1x Windswept Heath 1x Wooded Foothills 1x Woodland Cemetery	1x Animate Dead 1x Carpet of Flowers 1x Chains of Mephistopheles 1x Contamination 1x Dance of the Dead 1x Necromancy 1x Oppression 1x Pattern of Rebirth 1x Root Maze 1x Survival of the Fittest 1x Sylvan Library	1x Apprentice Necromancer 1x Arbor Elf 1x Birds of Paradise 1x Bloodthrone Vampire 1x Body Snatcher 1x Boreal Druid 1x Carrion Feeder 1x Caustic Caterpillar 1x Dark Confidant 1x Deathrite Shaman 1x Dross Hopper 1x Elves of Deep Shadow 1x Elvish Mystic 1x Eternal Witness 1x Fleshbag Marauder 1x Fyndhorn Elves 1x Gray Merchant of Asphodel 1x Grim Flayer 1x Llanowar Elves 1x Mikaeus, the Unhallowed 1x Mindblade Render 1x Mindslicer 1x Phyrexian Delver 1x Plaguecrafter 1x Priest of Titania 1x Protean Hulk 1x Razaketh, the Foulblooded 1x Reclamation Sage 1x Riftsweeper 1x Viscera Seer
Sorcery (9)		
	1x Buried Alive 1x Demonic Tutor 1x Diabolic Intent 1x Footsteps of the Goryo 1x Green Sun's Zenith 1x Imperial Seal 1x Life // Death 1x Reanimate 1x Toxic Deluge	

4.27 Hulkweaver

Deck Link: <https://tappedout.net/mtg-decks/protean-weaver/>

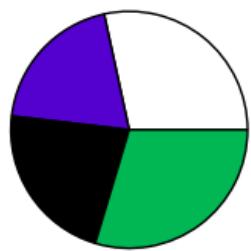
Discord Url: <https://discord.gg/gqjbmsD>

Author: trestian (<https://tappedout.net/users/trestian>)

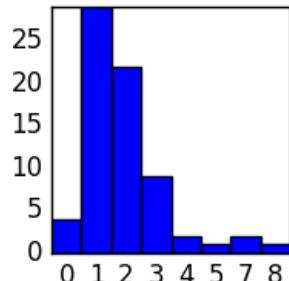
Commander(s): Thrasios, Triton Hero, Tymna the Weaver

Color: WUBG (W: 23 28.4% U: 16 19.8% B: 18 22.2% G: 24 29.6%)

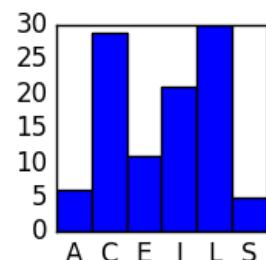
CMC: 1.93



(a) Mana Pie



(b) CMC Histogram



(c) Card Type Histogram

Figure 50: Hulkweaver

Decklist: Hulkweaver, Cockatrice Hash: 91sd8jpm

Commander (2)	Instant (21)	Sorcery (5)
1x Thrasios, Triton Hero	1x Brainstorm	1x Demonic Tutor
1x Tymna the Weaver	1x Cyclonic Rift	1x Diabolic Intent
	1x Delay	1x Imperial Seal
	1x Dispel	1x Life // Death
Land (30)	1x Eladamri's Call	1x Reanimate
1x Arid Mesa	1x Enlightened Tutor	
1x Bayou	1x Entomb	
1x Bloodstained Mire	1x Flash	Artifact (5)
1x Breeding Pool	1x Intuition	1x Chrome Mox
1x City of Brass	1x Memory's Journey	1x Lion's Eye Diamond
1x Command Tower	1x Mental Misstep	1x Mana Crypt
1x Flooded Strand	1x Mystical Tutor	1x Mox Diamond
1x Forest	1x Natural State	1x Sol Ring
1x Gaea's Cradle	1x Nature's Claim	
1x Godless Shrine	1x Negate	Creature (27)
1x Hallowed Fountain	1x Noxious Revival	1x Arbor Elf
1x Horizon Canopy	1x Silence	1x Auriok Salvagers
1x Island	1x Swan Song	1x Avacyn's Pilgrim
1x Mana Confluence	1x Swords to Plowshares	1x Aven Mindcensor
1x Marsh Flats	1x Vampiric Tutor	1x Birds of Paradise
1x Misty Rainforest	1x Worldly Tutor	1x Blood Artist
1x Overgrown Tomb		1x Dark Confidant
1x Polluted Delta		1x Deathrite Shaman
1x Savannah	Enchantment (10)	1x Eidolon of Rhetoric
1x Scalding Tarn	1x Animate Dead	1x Elesh Norn, Grand Cenobite
1x Scrubland	1x Aura of Silence	1x Elves of Deep Shadow
1x Swamp	1x Carpet of Flowers	1x Elvish Mystic
1x Tarnished Citadel	1x Dance of the Dead	1x Eternal Witness
1x Temple Garden	1x Mystic Remora	1x Ethersworn Canonist
1x Tropical Island	1x Necromancy	1x Fyndhorn Elves
1x Tundra	1x Root Maze	1x Gilded Drake
1x Underground Sea	1x Stony Silence	1x Grand Abolisher
1x Verdant Catacombs	1x Survival of the Fittest	1x Karmic Guide
1x Windswept Heath	1x Sylvan Library	1x Leonin Relic-Warder
1x Wooded Foothills		1x Linvala, Keeper of Silence
		1x Noble Hierarch
		1x Phantasmal Image
		1x Protean Hulk
		1x Razaketh, the Foulblooded
		1x Saffi Eriksdotter
		1x Spellseeker
		1x Viscera Seer

4.28 Jeleva Storm

Deck Link: <https://tappedout.net/mtg-decks/jeleva-slim/>

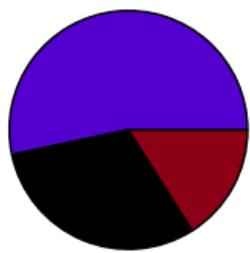
Discord Url: <https://discord.gg/6v7wkPT>

Author: reversemermaid (<https://tappedout.net/users/reversemermaid>)

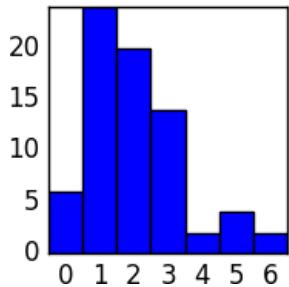
Commander(s): Jeleva, Nephila's Scourge

Color: UBR (U: 40 53.3% B: 23 30.7% R: 12 16.0%)

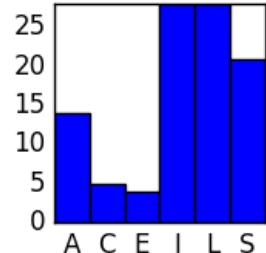
CMC: 2.03



(a) Mana Pie



(b) CMC Histogram



(c) Card Type Histogram

Figure 51: Jeleva Storm

Decklist: Jeleva Storm, Cockatrice Hash: ku0th0ap

Commander (1)	Instant (28)	Sorcery (21)
1x Jeleva, Nephalias Scourge	1x Ad Nauseam	1x Bonus Round
Land (28)	1x Brainstorm	1x By Force
1x Ancient Tomb	1x Cabal Ritual	1x Dark Petition
1x Arid Mesa	1x Chain of Vapor	1x Demonic Tutor
1x Badlands	1x Cyclonic Rift	1x Doomsday
1x Blood Crypt	1x Dark Ritual	1x Gamble
1x Bloodstained Mire	1x Delay	1x Gitaxian Probe
1x City of Brass	1x Dispel	1x Grim Tutor
1x Command Tower	1x Dramatic Reversal	1x Imperial Seal
1x Flooded Strand	1x Flusterstorm	1x Merchant Scroll
7x Island	1x Force of Will	1x Mind's Desire
1x Mana Confluence	1x Frantic Search	1x Mnemonic Betrayal
1x Marsh Flats	1x Gush	1x Night's Whisper
1x Misty Rainforest	1x High Tide	1x Ponder
1x Morphic Pool	1x Impulse	1x Preordain
1x Polluted Delta	1x Intuition	1x Rite of Flame
1x Scalding Tarn	1x Mana Drain	1x Timetwister
1x Steam Vents	1x Mental Misstep	1x Toxic Deluge
1x Sunken Ruins	1x Mystical Tutor	1x Wheel of Fortune
1x Underground Sea	1x Pyroblast	1x Windfall
1x Verdant Catacombs	1x Red Elemental Blast	1x Yawgmoth's Will
1x Volcanic Island	1x Remand	Artifact (14)
1x Watery Grave	1x Seething Song	1x Chrome Mox
1x Wooded Foothills	1x Snap	1x Dimir Signet
Enchantment (4)	1x Spell Pierce	1x Fellwar Stone
1x Copy Artifact	1x Swan Song	1x Grim Monolith
1x Mystic Remora	1x Unsubstantiate	1x Izzet Signet
1x Necropotence	1x Vampiric Tutor	1x Lion's Eye Diamond
1x Thousand-Year Storm		1x Lotus Petal
Creature (4)		1x Mana Crypt
1x Baral, Chief of Compliance		1x Mana Vault
1x Goblin Electromancer		1x Mox Diamond
1x Laboratory Maniac		1x Mox Opal
1x Notion Thief		1x Sensei's Divining Top
		1x Sol Ring
		1x Talisman of Dominance

4.29 Kess Storm

Deck Link: <https://tappedout.net/mtg-decks/grixis-flux-1/>

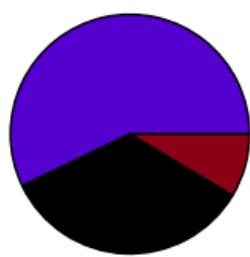
Discord Url: <https://discord.gg/NeP6sAs>

Author: Wedge-cEDH (<https://tappedout.net/users/Wedge-cEDH>)

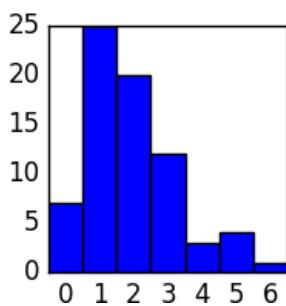
Commander(s): Kess, Dissident Mage

Color: UBR (U: 40 57.1% B: 24 34.3% R: 6 8.6%)

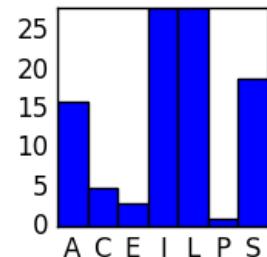
CMC: 1.93



(a) Mana Pie



(b) CMC Histogram



(c) Card Type Histogram

Figure 52: Kess Storm

Decklist: Kess Storm, Cockatrice Hash: 1tjtt1d8

Commander (1)	Instant (28)	Sorcery (19)
1x Kess, Dissident Mage	1x Ad Nauseam 1x Brainstorm 1x Cabal Ritual 1x Chain of Vapor 1x Counterspell 1x Cyclonic Rift 1x Dark Ritual 1x Delay 1x Demonic Consultation 1x Dispel 1x Dramatic Reversal 1x Flusterstorm 1x Force of Will 1x Frantic Search 1x Gush 1x High Tide 1x Impulse 1x Intuition 1x Lim-Dûl's Vault 1x Mana Drain 1x Mental Misstep 1x Mystical Tutor 1x Pact of Negation 1x Pyroblast 1x Rebuild 1x Snap 1x Swan Song 1x Vampiric Tutor	1x Dark Petition 1x Demonic Tutor 1x Doomsday 1x Gamble 1x Gitaxian Probe 1x Imperial Seal 1x Merchant Scroll 1x Mind's Desire 1x Night's Whisper 1x Ponder 1x Preordain 1x Rolling Earthquake 1x Sleight of Hand 1x Thoughtseize 1x Timetwister 1x Toxic Deluge 1x Wheel of Fortune 1x Windfall 1x Yawgmoth's Will
Land (28)		Artifact (16)
1x Ancient Tomb 1x Arid Mesa 1x Badlands 1x Bloodstained Mire 1x City of Brass 1x Command Tower 1x Flooded Strand 1x Gemstone Caverns 8x Island 1x Mana Confluence 1x Marsh Flats 1x Misty Rainforest 1x Polluted Delta 1x Scalding Tarn 1x Steam Vents 1x Swamp 1x Underground Sea 1x Verdant Catacombs 1x Volcanic Island 1x Watery Grave 1x Wooded Foothills		1x Aetherflux Reservoir 1x Candelabra of Tawnos 1x Chrome Mox 1x Dimir Signet 1x Fellwar Stone 1x Grim Monolith 1x Izzet Signet 1x Lion's Eye Diamond 1x Lotus Petal 1x Mana Crypt 1x Mana Vault 1x Mox Diamond 1x Mox Opal 1x Sensei's Divining Top 1x Sol Ring 1x Talisman of Dominance
Enchantment (3)		
1x Copy Artifact 1x Mystic Remora 1x Necropotence		
Planeswalker (1)		
1x Dack Fayden		
Creature (4)		
1x Baral, Chief of Compliance 1x Dark Confidant 1x Laboratory Maniac 1x Notion Thief		

4.30 Kraum's MANly Combo

Deck Link: <http://tappedout.net/mtg-decks/16-11-17-troll-deck/>

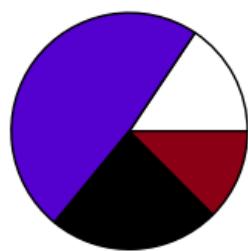
Discord Url: <https://discord.gg/9AwgYgs>

Author: Lilbrudder (<https://tappedout.net/users/Lilbrudder>)

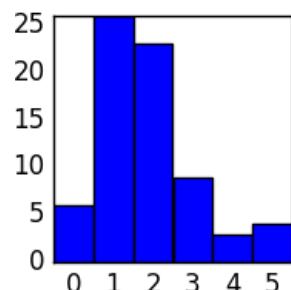
Commander(s): Kraum, Ludevic's Opus, Tymna the Weaver

Color: WUBR (W: 10 15.6% U: 31 48.4% B: 15 23.4% R: 8 12.5%)

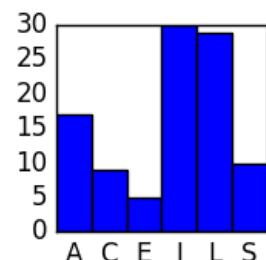
CMC: 1.85



(a) Mana Pie



(b) CMC Histogram



(c) Card Type Histogram

Figure 53: Kraum's MANly Combo

Decklist: Kraum's MANly Combo, Cockatrice Hash: mga0m2rp

Commander (2)	Instant (30)	Enchantment (5)
1x Kraum, Ludevic's Opus	1x Ad Nauseam	1x Copy Artifact
1x Tymna the Weaver	1x Brainstorm	1x Mystic Remora
	1x Chain of Vapor	1x Rest in Peace
	1x Cyclonic Rift	1x Rhystic Study
Land (29)	1x Dark Ritual	1x Smothering Tithe
1x Ancient Tomb	1x Delay	
1x Arid Mesa	1x Disenchant	Sorcery (10)
1x Badlands	1x Dispel	1x Demonic Tutor
1x Bloodstained Mire	1x Dramatic Reversal	1x Gamble
1x City of Brass	1x Enlightened Tutor	1x Gitaxian Probe
1x Command Tower	1x Fire Covenant	1x Imperial Seal
1x Exotic Orchard	1x Flusterstorm	1x Ponder
1x Flooded Strand	1x Force of Will	1x Praetor's Grasp
1x Forbidden Orchard	1x Impulse	1x Preordain
1x Gemstone Caverns	1x Lim-Dûl's Vault	1x Timetwister
1x Hallowed Fountain	1x Mana Drain	1x Wheel of Fortune
1x Island	1x Mental Misstep	1x Winds of Change
1x Mana Confluence	1x Mystical Tutor	Artifact (17)
1x Marsh Flats	1x Opt	1x Chrome Mox
1x Misty Rainforest	1x Pact of Negation	1x Cursed Totem
1x Morphic Pool	1x Plunge into Darkness	1x Fellwar Stone
1x Plateau	1x Pyroblast	1x Grafdigger's Cage
1x Polluted Delta	1x Red Elemental Blast	1x Grim Monolith
1x Scalding Tarn	1x Silence	1x Isochron Scepter
1x Scrubland	1x Swan Song	1x Lotus Petal
1x Snow-Covered Island	1x Swords to Plowshares	1x Mana Crypt
1x Steam Vents	1x Tainted Pact	1x Mana Vault
1x Tundra	1x Vampiric Tutor	1x Mox Diamond
1x Underground River	1x Wear // Tear	1x Mox Opal
1x Underground Sea	1x Winds of Rebuke	1x Paradox Engine
1x Verdant Catacombs		1x Sensei's Divining Top
1x Volcanic Island		1x Sol Ring
1x Watery Grave		1x Talisman of Dominance
1x Windswept Heath		1x Talisman of Indulgence
		1x Talisman of Progress
		Creature (7)
		1x Aven Mindcensor
		1x Dark Confidant
		1x Gilded Drake
		1x Grand Arbiter Augustin IV
		1x Laboratory Maniac
		1x Notion Thief
		1x Stormscape Familiar

4.31 Mad Farm

Deck Link: <http://tappedout.net/mtg-decks/mad-farm/>

Discord Url: N/A

Author: RiverMayCry (<https://tappedout.net/users/RiverMayCry>)

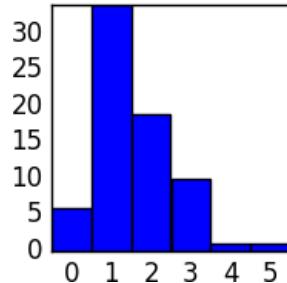
Commander(s): Bruse Tarl, Boorish Herder, Tymna the Weaver

Color: WBR (W: 14 22.6% B: 29 46.8% R: 19 30.6%)

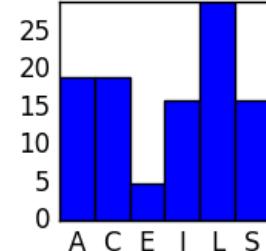
CMC: 1.56



(a) Mana Pie



(b) CMC Histogram



(c) Card Type Histogram

Figure 54: Mad Farm

Decklist: Mad Farm, Cockatrice Hash: t3fk35mb

Commander (2)	Instant (16)	Sorcery (16)
1x Bruse Tarl, Boorish Herder	1x Ad Nauseam	1x Cabal Therapy
1x Tymna the Weaver	1x Angel's Grace	1x Demonic Tutor
Land (29)	1x Cabal Ritual	1x Diabolic Intent
1x Ancient Tomb	1x Culling the Weak	1x Faithless Looting
1x Arid Mesa	1x Dark Ritual	1x Fragmentize
1x Badlands	1x Enlightened Tutor	1x Gamble
1x Blood Crypt	1x Entomb	1x Imperial Seal
1x Bloodstained Mire	1x Pyroblast	1x Infernal Plunge
1x Boseiju, Who Shelters All	1x Rain of Filth	1x Praetor's Grasp
1x Cavern of Souls	1x Red Elemental Blast	1x Rite of Flame
1x Command Tower	1x Rending Volley	1x Sickening Dreams
1x Fetid Heath	1x Seething Song	1x Thoughtseize
1x Flooded Strand	1x Silence	1x Twinflame
1x Gemstone Caverns	1x Swords to Plowshares	1x Vandalblast
1x Godless Shrine	1x Tainted Pact	1x Wheel of Fortune
1x Marsh Flats	1x Vampiric Tutor	1x Yawgmoth's Will
1x Phyrexian Tower	Enchantment (5)	Artifact (15)
1x Plateau	1x Animate Dead	1x Chrome Mox
1x Polluted Delta	1x Dance of the Dead	1x Fellwar Stone
1x Sacred Foundry	1x Goblin Bombardment	1x Grim Monolith
1x Scalding Tarn	1x Necromancy	1x Lotus Petal
1x Scrubland	1x Necropotence	1x Mana Crypt
1x Snow-Covered Mountain		1x Mana Vault
1x Snow-Covered Plains		1x Mox Diamond
1x Snow-Covered Swamp		1x Mox Opal
1x Strip Mine		1x Nihil Spellbomb
1x Swamp		1x Orzhov Signet
1x Urborg, Tomb of Yawgmoth		1x Rakdos Signet
1x Vault of Whispers		1x Scroll Rack
1x Verdant Catacombs		1x Sensei's Divining Top
1x Windswept Heath		1x Sol Ring
1x Wooded Foothills		1x Talisman of Indulgence
		Creature (17)
		1x Blood Pet
		1x Children of Korlis
		1x Dark Confidant
		1x Dualcaster Mage
		1x Gorilla Shaman
		1x Grand Abolisher
		1x Hope of Ghirapur
		1x Insolent Neonate
		1x Leonin Relic-Warder
		1x Memnite
		1x Myr Moonvessel
		1x Overeager Apprentice
		1x Serra Ascendant
		1x Simian Spirit Guide
		1x Skirk Prospector
		1x Weathered Wayfarer

4.32 Melt Banana

Deck Link: <http://tappedout.net/mtg-decks/melt-banana/>

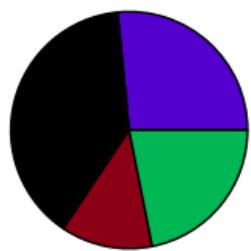
Discord Url: N/A

Author: JimWolfie (<https://tappedout.net/users/JimWolfie>)

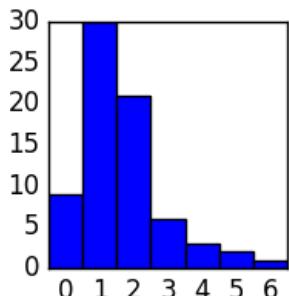
Commander(s): Yidris, Maelstrom Wielder

Color: UBRG (U: 17 26.6% B: 25 39.1% R: 8 12.5% G: 14 21.9%)

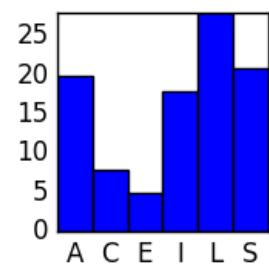
CMC: 1.64



(a) Mana Pie



(b) CMC Histogram



(c) Card Type Histogram

Figure 55: Melt Banana

Decklist: Melt Banana, Cockatrice Hash: 5ivvevam

Commander (1)	Instant (18)	Sorcery (21)
1x Yidris, Maelstrom Wielder	1x Abrade 1x Abrupt Decay 1x Ad Nauseam 1x Brainstorm 1x Cabal Ritual 1x Chain of Vapor 1x Culling the Weak 1x Dark Ritual 1x Dramatic Reversal 1x Intuition 1x Lim-Dûl's Vault 1x Mana Drain 1x Manamorphose 1x Mystical Tutor 1x Nature's Claim 1x Noxious Revival 1x Rain of Filth 1x Vampiric Tutor	1x Ancestral Vision 1x Dark Petition 1x Demonic Tutor 1x Diabolic Intent 1x Duress 1x Gamble 1x Gitaxian Probe 1x Grim Tutor 1x Imperial Seal 1x Inquisition of Kozilek 1x Mind's Desire 1x Past in Flames 1x Ponder 1x Preordain 1x Summer Bloom 1x Thoughtseize 1x Timetwister 1x Wheel of Fate 1x Wheel of Fortune 1x Windfall 1x Yawgmoth's Will
Land (28)	Creature (7)	Artifact (20)
1x Ancient Tomb 1x Arid Mesa 1x Badlands 1x Bayou 1x Blood Crypt 1x Bloodstained Mire 1x Breeding Pool 1x City of Brass 1x Command Tower 1x Flooded Strand 1x Lake of the Dead 1x Mana Confluence 1x Marsh Flats 1x Misty Rainforest 1x Overgrown Tomb 1x Polluted Delta 1x Scalding Tarn 1x Steam Vents 1x Stomping Ground 1x Taiga 1x Tropical Island 1x Underground Sea 1x Urborg, Tomb of Yawgmoth 1x Verdant Catacombs 1x Volcanic Island 1x Watery Grave 1x Windswept Heath 1x Wooded Foothills	1x Birds of Paradise 1x Dark Confidant 1x Deathrite Shaman 1x Elves of Deep Shadow 1x Orcish Lumberjack 1x Tinder Wall 1x Wild Cantor	1x Aether Spellbomb 1x Aetherflux Reservoir 1x Chrome Mox 1x Dimir Signet 1x Fellwar Stone 1x Golgari Signet 1x Grim Monolith 1x Helm of Awakening 1x Isochron Scepter 1x Lion's Eye Diamond 1x Lotus Bloom 1x Lotus Petal 1x Mana Crypt 1x Mana Vault 1x Mox Diamond 1x Mox Opal 1x Sensei's Divining Top 1x Sol Ring 1x Talisman of Dominance 1x Talisman of Impulse
Enchantment (5)		
1x Carpet of Flowers 1x Exploration 1x Mystic Remora 1x Squandered Resources 1x Waste Not		

4.33 Meta Pod

Deck Link: <http://tappedout.net/mtg-decks/meta-pod/>

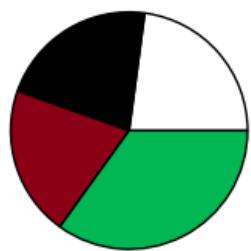
Discord Url: <https://discord.gg/q7Ehb9d>

Author: infiniteimoc (<https://tappedout.net/users/infiniteimoc>)

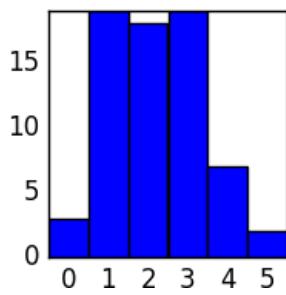
Commander(s): Tana, the Bloodsower, Tymna the Weaver

Color: WBRG (W: 19 22.9% B: 18 21.7% R: 17 20.5% G: 29 34.9%)

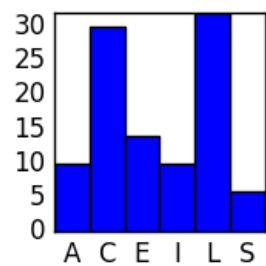
CMC: 2.21



(a) Mana Pie



(b) CMC Histogram



(c) Card Type Histogram

Figure 56: Meta Pod

Decklist: Meta Pod, Cockatrice Hash: gd2020t2

Commander (2)	Instant (10)	Artifact (9)
1x Tana, the Bloodsower	1x Abrupt Decay	1x Birthing Pod
1x Tymna the Weaver	1x Assassin's Trophy	1x Chrome Mox
	1x Eladamri's Call	1x Mana Crypt
	1x Enlightened Tutor	1x Mox Diamond
Land (32)	1x Fire Covenant	1x Null Rod
1x Ancient Tomb	1x Noxious Revival	1x Sol Ring
1x Arid Mesa	1x Pyroblast	1x Sphere of Resistance
1x Badlands	1x Red Elemental Blast	1x Tangle Wire
1x Bayou	1x Vampiric Tutor	1x Trinisphere
1x Bloodstained Mire	1x Zealous Persecution	
1x City of Brass		
1x Command Tower		
1x Flooded Strand	Enchantment (13)	Creature (28)
1x Forbidden Orchard	1x Aura of Silence	1x Anafenza, the Foremost
2x Forest	1x Blood Moon	1x Arbor Elf
1x Gaea's Cradle	1x Carpet of Flowers	1x Avacyn's Pilgrim
1x Godless Shrine	1x Compost	1x Aven Mindcensor
1x Horizon Canopy	1x Leyline of the Void	1x Azra Oddsmaker
1x Mana Confluence	1x Necromancy	1x Birds of Paradise
1x Marsh Flats	1x Root Maze	1x Bloom Tender
1x Misty Rainforest	1x Rule of Law	1x Dark Confidant
1x Overgrown Tomb	1x Splinter Twin	1x Deathrite Shaman
1x Plains	1x Stony Silence	1x Eidolon of Rhetoric
1x Plateau	1x Stranglehold	1x Elves of Deep Shadow
1x Polluted Delta	1x Survival of the Fittest	1x Elvish Mystic
1x Savannah	1x Sylvan Library	1x Ethersworn Canonist
1x Scalding Tarn		1x Felidar Guardian
1x Scrubland		1x Fyndhorn Elves
1x Stomping Ground	Sorcery (6)	1x Goblin Sharpshooter
1x Swamp	1x Buried Alive	1x Karmic Guide
1x Taiga	1x Demonic Tutor	1x Kiki-Jiki, Mirror Breaker
1x Tarnished Citadel	1x Diabolic Intent	1x Linvala, Keeper of Silence
1x Temple Garden	1x Eldritch Evolution	1x Llanowar Elves
1x Verdant Catacombs	1x Imperial Seal	1x Loyal Apprentice
1x Windswept Heath	1x Reanimate	1x Magus of the Moon
1x Wooded Foothills		1x Quirion Ranger
		1x Runic Armasaur
		1x Thalia, Guardian of Thraben
		1x Vexing Shusher
		1x Village Bell-Ringer
		1x Yisan, the Wanderer Bard

4.34 Midrange Yisan

Deck Link: <https://tappedout.net/mtg-decks/wanderers-song/>

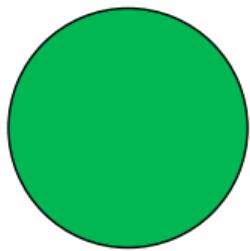
Discord Url: <https://discord.gg/ukqBA8U>

Author: ShaperSavant (<https://tappedout.net/users/ShaperSavant>)

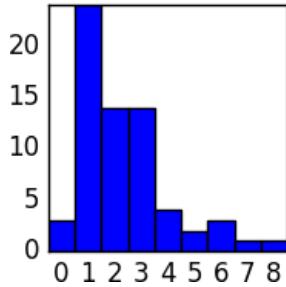
Commander(s): Yisan, the Wanderer Bard

Color: G (G: 64 100.0%)

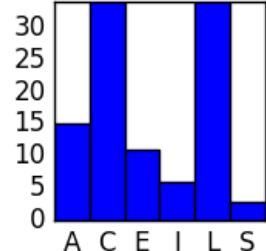
CMC: 2.32



(a) Mana Pie



(b) CMC Histogram



(c) Card Type Histogram

Figure 57: Midrange Yisan

Decklist: Midrange Yisan, Cockatrice Hash: 6bh8cc32

Commander (1)	Sorcery (3)	Creature (32)
1x Yisan, the Wanderer Bard	1x Green Sun's Zenith 1x Natural Order 1x Sylvan Scrying	1x Arbor Elf 1x Azusa, Lost but Seeking 1x Bane of Progress 1x Birds of Paradise 1x Boreal Druid 1x Caustic Caterpillar 1x Craterhoof Behemoth 1x Duplicant 1x Elvish Mystic 1x Eternal Witness 1x Fyndhorn Elves 1x Karametra's Acolyte 1x Kraul Harpooner 1x Llanowar Elves 1x Manglehorn 1x Phyrexian Revoker 1x Priest of Titania 1x Quirion Ranger 1x Ravenous Slime 1x Reclamation Sage 1x Regal Force 1x Runic Armasaur 1x Sakura-Tribe Scout 1x Scavenging Ooze 1x Scryb Ranger 1x Seedborn Muse 1x Somberwald Stag 1x Sylvan Safekeeper 1x Temur Sabertooth 1x Thought-Knot Seer 1x Wirewood Symbiote 1x Woodland Bellower
Land (34)	Artifact (13)	
1x Ancient Tomb 1x Cavern of Souls 1x Dryad Arbor 1x Gaea's Cradle 1x Gemstone Caverns 1x Misty Rainforest 1x Mouth of Ronom 1x Nykthos, Shrine to Nyx 21x Snow-Covered Forest 1x Strip Mine 1x Verdant Catacombs 1x Windswept Heath 1x Wooded Foothills 1x Yavimaya Hollow	1x Chrome Mox 1x Mana Crypt 1x Mox Diamond 1x Null Rod 1x Sensei's Divining Top 1x Sol Ring 1x Sphere of Resistance 1x Staff of Domination 1x Tangle Wire 1x Thorn of Amethyst 1x Trinisphere 1x Umbral Mantle 1x Winter Orb	
Instant (6)		
1x Beast Within 1x Benefactor's Draught 1x Chord of Calling 1x Crop Rotation 1x Nature's Claim 1x Worldly Tutor		
Enchantment (11)		
1x Burgeoning 1x Carpet of Flowers 1x Exploration 1x Lignify 1x Mirri's Guile 1x Root Maze 1x Song of the Dryads 1x Survival of the Fittest 1x Sylvan Library 1x Utopia Sprawl 1x Wild Growth		

4.35 Mimeo Reanimator Hulk

Deck Link: <http://tappedout.net/mtg-decks/19-09-16-the-mimeoplasm-edh/>

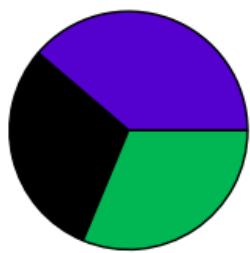
Discord Url: <https://discord.gg/zsePv5T>

Author: monkeryz (<https://tappedout.net/users/monkeryz>)

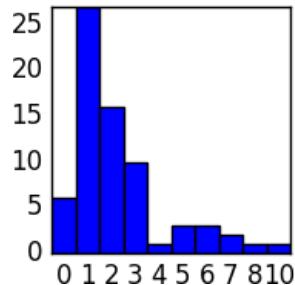
Commander(s): The Mimeoplasm

Color: UBG (U: 31 38.8% B: 24 30.0% G: 25 31.2%)

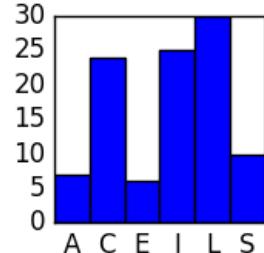
CMC: 2.26



(a) Mana Pie



(b) CMC Histogram



(c) Card Type Histogram

Figure 58: Mimeo Reanimator Hulk

Decklist: Mimeo Reanimator Hulk, Cockatrice Hash: pi8gps9s

Commander (1)	Instant (25)	Sorcery (10)
1x The Mimeoplasm	1x Abrupt Decay 1x Assassin's Trophy 1x Brainstorm 1x Chain of Vapor 1x Cyclonic Rift 1x Dark Ritual 1x Delay 1x Entomb 1x Flash 1x Flusterstorm 1x Force of Will 1x Frantic Search 1x Intuition 1x Mana Drain 1x Mental Misstep 1x Mystical Tutor 1x Natural State 1x Nature's Claim 1x Negate 1x Noxious Revival 1x Pact of Negation 1x Swan Song 1x Vampiric Tutor 1x Winds of Rebuke 1x Worldly Tutor	1x Buried Alive 1x Careful Study 1x Demonic Tutor 1x Imperial Seal 1x Life // Death 1x Ponder 1x Reanimate 1x Regrowth 1x Toxic Deluge 1x Windfall
Land (30)		Creature (23)
1x Ancient Tomb 1x Bayou 1x Bazaar of Baghdad 1x Bloodstained Mire 1x Breeding Pool 1x Cavern of Souls 1x City of Brass 1x Command Tower 1x Flooded Strand 1x Forbidden Orchard 3x Forest 1x Llanowar Wastes 1x Mana Confluence 1x Marsh Flats 1x Misty Rainforest 1x Morphic Pool 1x Overgrown Tomb 1x Polluted Delta 1x Scalding Tarn 1x Swamp 1x Tropical Island 1x Underground Sea 1x Urborg, Tomb of Yawgmoth		1x Arbor Elf 1x Bane of Progress 1x Birds of Paradise 1x Body Double 1x Deathrite Shaman 1x Elves of Deep Shadow 1x Elvish Spirit Guide 1x Eternal Witness 1x Fyndhorn Elves 1x Gilded Drake 1x Jace, Vryn's Prodigy 1x Jin-Gitaxias, Core Augur 1x Llanowar Elves 1x Mikaeus, the Unhallowed 1x Necrotic Ooze 1x Nezahal, Primal Tide 1x Phyrexian Devourer 1x Protean Hulk 1x Razaketh, the Foulblooded 1x Snapcaster Mage 1x Spellseeker 1x Viscera Seer 1x Walking Ballista
Artifact (5)	Enchantment (6)	
1x Chrome Mox 1x Lion's Eye Diamond 1x Mana Crypt 1x Mox Diamond 1x Sol Ring	1x Animate Dead 1x Carpet of Flowers 1x Mystic Remora 1x Necromancy 1x Survival of the Fittest 1x Sylvan Library	

4.36 Momir Hackball

Deck Link: <https://tappedout.net/mtg-decks/hackball-momir-vig-primer-wip/>

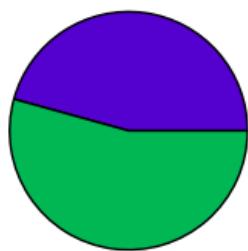
Discord Url: <https://discord.gg/K7AUzH4>

Author: AverageDragon (<https://tappedout.net/users/AverageDragon>)

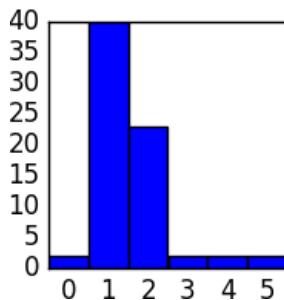
Commander(s): Momir Vig, Simic Visionary

Color: UG (U: 32 45.7% G: 38 54.3%)

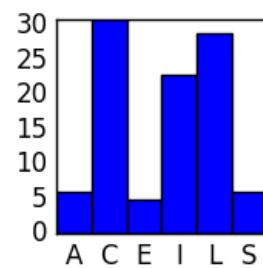
CMC: 1.55



(a) Mana Pie



(b) CMC Histogram



(c) Card Type Histogram

Figure 59: Momir Hackball

Decklist: Momir Hackball, Cockatrice Hash: d22ds6i2

Commander (1)	Instant (23)	Creature (30)
1x Momir Vig, Simic Visionary	1x Alter Reality 1x Brainstorm 1x Crop Rotation 1x Delay 1x Dispel 1x Flusterstorm 1x Force of Will 1x Glamerdye 1x Mana Drain 1x Mana Leak 1x Mental Misstep 1x Mind Bend 1x Mystical Tutor 1x Nature's Claim 1x Negate 1x Pongify 1x Sleight of Mind 1x Spectral Shift 1x Spell Pierce 1x Swan Song 1x Whim of Volrath 1x Winds of Rebuke 1x Worldly Tutor	1x Arbor Elf 1x Birchlore Rangers 1x Birds of Paradise 1x Boreal Druid 1x Caustic Caterpillar 1x Devoted Druid 1x Elvish Mystic 1x Fyndhorn Elves 1x Gilded Drake 1x Heart Warden 1x Heritage Druid 1x Joraga Treespeaker 1x Kiora's Follower 1x Llanowar Elves 1x Nantuko Tracer 1x Nettle Sentinel 1x Phantasmal Image 1x Priest of Titania 1x Quirion Ranger 1x Reclamation Sage 1x Riftsweeper 1x Scavenging Ooze 1x Sidisi's Faithful 1x Somberwald Sage 1x Sylvan Safekeeper 1x Temur Sabertooth 1x Vizier of the Menagerie 1x Voyaging Satyr 1x Wall of Roots 1x Wirewood Symbiote
Land (29)		
1x Ancient Tomb 1x Botanical Sanctum 1x Breeding Pool 1x Cavern of Souls 1x City of Brass 1x Command Tower 1x Flooded Grove 1x Flooded Strand 1x Forbidden Orchard 5x Forest 1x Gaea's Cradle 1x Gemstone Caverns 4x Island 1x Mana Confluence 1x Misty Rainforest 1x Polluted Delta 1x Scalding Tarn 1x Tropical Island 1x Verdant Catacombs 1x Windswept Heath 1x Wooded Foothills 1x Yavimaya Coast		
Enchantment (5)		
1x Carpet of Flowers 1x Mystic Remora 1x Sylvan Library 1x Utopia Sprawl 1x Wild Growth	1x Chrome Mox 1x Grim Monolith 1x Mana Crypt 1x Mana Vault 1x Null Rod 1x Sol Ring	
Sorcery (6)		
1x Glimpse of Nature 1x Green Sun's Zenith 1x Merchant Scroll 1x Ponder 1x Preordain 1x Trait Doctoring		

4.37 Najeela Hermit Hulk

Deck Link: <https://deckstats.net/decks/50436/1091682-najeela-druid-hulk>

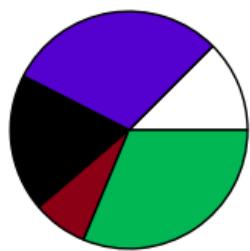
Discord Url: <https://discord.gg/eFed3Yg>

Author: frozeninfate (<https://deckstats.net/decks/50436/?lng=en>)

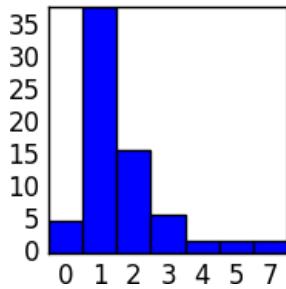
Commander(s): Najeela, the Blade-Blossom

Color: WUBRG (W: 10 12.5% U: 24 30.0% B: 15 18.8% R: 6 7.5% G: 25 31.2%)

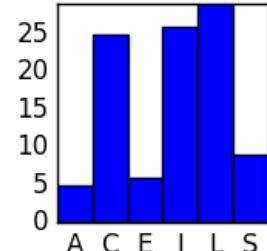
CMC: 1.69



(a) Mana Pie



(b) CMC Histogram



(c) Card Type Histogram

Figure 60: Najeela Hermit Hulk

Decklist: Najeela Hermit Hulk, Cockatrice Hash: vk9h7q1d

Commander (1)	Instant (26)	Sorcery (9)
1x Najeela, the Blade-Blossom	1x Abrupt Decay 1x Assassin's Trophy 1x Brainstorm 1x Chain of Vapor 1x Dispel 1x Eladamri's Call 1x Enlightened Tutor 1x Fire Covenant 1x Flash 1x Flusterstorm 1x Force of Will 1x Lim-Dûl's Vault 1x Mental Misstep 1x Misdirection 1x Mystical Tutor 1x Nature's Claim 1x Noxious Revival 1x Pact of Negation 1x Pyroblast 1x Red Elemental Blast 1x Silence 1x Spell Pierce 1x Summoner's Pact 1x Swan Song 1x Vampiric Tutor 1x Worldly Tutor	1x Cabal Therapy 1x Demonic Tutor 1x Diabolic Intent 1x Dread Return 1x Gamble 1x Gitaxian Probe 1x Imperial Seal 1x Ponder 1x Preordain
Land (29)		Artifact (5)
1x Arid Mesa 1x Badlands 1x Bayou 1x Bloodstained Mire 1x Breeding Pool 1x City of Brass 1x Command Tower 1x Exotic Orchard 1x Flooded Strand 1x Forbidden Orchard 1x Gaea's Cradle 1x Gemstone Caverns 1x Mana Confluence 1x Marsh Flats 1x Misty Rainforest 1x Overgrown Tomb 1x Polluted Delta 1x Savannah 1x Scalding Tarn 1x Scrubland 1x Taiga 1x Tarnished Citadel 1x Tropical Island 1x Tundra 1x Underground Sea 1x Verdant Catacombs 1x Volcanic Island 1x Windswept Heath 1x Wooded Foothills	1x Chrome Mox 1x Mana Crypt 1x Mox Diamond 1x Skullclamp 1x Sol Ring	
		Creature (24)
		1x Angel of Glory's Rise 1x Arbor Elf 1x Avacyn's Pilgrim 1x Birds of Paradise 1x Cephalid Illusionist 1x Dark Confidant 1x Deathrite Shaman 1x Derevi, Empyrial Tactician 1x Elves of Deep Shadow 1x Elvish Mystic 1x Fyndhorn Elves 1x Gilded Drake 1x Grand Abolisher 1x Hermit Druid 1x Laboratory Maniac 1x Lightning Mauler 1x Llanowar Elves 1x Mindblade Render 1x Narcomoeba 1x Noble Hierarch 1x Nomads en-Kor 1x Protean Hulk 1x Spellseeker 1x Tymna the Weaver
		Enchantment (6)
	1x Carpet of Flowers 1x Mystic Remora 1x Nature's Will 1x Sylvan Library 1x Utopia Sprawl 1x Wild Growth	

4.38 Najeela Tempo

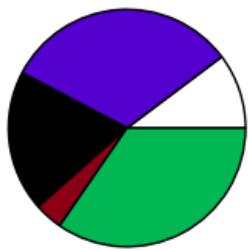
Deck Link: <https://tappedout.net/mtg-decks/warrior-queen-najeela-midrangetempo-cedh-primer/>
Discord Url: <https://discord.gg/eFed3Yg>

Author: Pongo_Pygmaeu5 (https://tappedout.net/users/Pongo_Pygmaeu5)

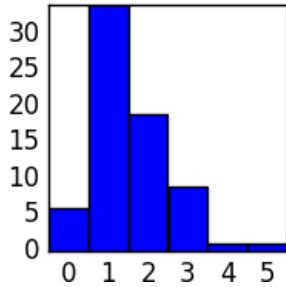
Commander(s): Najeela, the Blade-Blossom

Color: WUBRG (W: 8 10.3% U: 25 32.1% B: 15 19.2% R: 3 3.8% G: 27 34.6%)

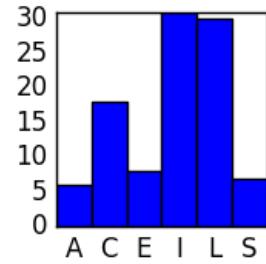
CMC: 1.54



(a) Mana Pie



(b) CMC Histogram



(c) Card Type Histogram

Figure 61: Najeela Tempo

Decklist: Najeela Tempo, Cockatrice Hash: nc0aq3i8

Commander (1)	Instant (31)	Enchantment (8)
1x Najeela, the Blade-Blossom	1x Abrupt Decay 1x Assassin's Trophy 1x Brainstorm 1x Counterspell 1x Cyclonic Rift 1x Delay 1x Demonic Consultation 1x Dispel 1x Eladamri's Call 1x Enlightened Tutor 1x Fire Covenant 1x Flusterstorm 1x Force of Will 1x Lim-Dûl's Vault 1x Mana Drain 1x Mental Misstep 1x Mystical Tutor 1x Natural State 1x Nature's Claim 1x Negate 1x Noxious Revival 1x Pact of Negation 1x Plunge into Darkness 1x Pyroblast 1x Silence 1x Spell Pierce 1x Summoner's Pact 1x Swan Song 1x Swords to Plowshares 1x Tainted Pact 1x Vampiric Tutor	1x Carpet of Flowers 1x Druids' Repository 1x Mystic Remora 1x Nature's Will 1x Rest in Peace 1x Sylvan Library 1x Utopia Sprawl 1x Wild Growth
Land (30)		Sorcery (7)
1x Arid Mesa 1x Badlands 1x Bayou 1x Bloodstained Mire 1x Breeding Pool 1x City of Brass 1x Command Tower 1x Exotic Orchard 1x Flooded Strand 1x Forest 1x Gaea's Cradle 1x Mana Confluence 1x Marsh Flats 1x Misty Rainforest 1x Overgrown Tomb 1x Polluted Delta 1x Savannah 1x Scalding Tarn 1x Scrubland 1x Taiga 1x Tarnished Citadel 1x Tropical Island 1x Tundra 1x Underground Sea 1x Verdant Catacombs 1x Volcanic Island 1x Watery Grave 1x Windswept Heath 1x Wooded Foothills 1x Yavimaya Coast		1x Demonic Tutor 1x Diabolic Intent 1x Eldritch Evolution 1x Gitaxian Probe 1x Imperial Seal 1x Ponder 1x Preordain
		Artifact (6)
		1x Chrome Mox 1x Lotus Petal 1x Mana Crypt 1x Mox Diamond 1x Null Rod 1x Sol Ring
		Creature (17)
		1x Arbor Elf 1x Avacyn's Pilgrim 1x Aven Mindcensor 1x Birds of Paradise 1x Dark Confidant 1x Deathrite Shaman 1x Derevi, Empyrial Tactician 1x Edric, Spymaster of Trest 1x Elves of Deep Shadow 1x Elvish Mystic 1x Fyndhorn Elves 1x Gilded Drake 1x Laboratory Maniac 1x Llanowar Elves 1x Mindblade Render 1x Noble Hierarch 1x Tymna the Weaver

4.39 Nooze Reanimator

Deck Link: <http://tappedout.net/mtg-decks/4c-necrotic-ooze-brewsday-112216/>

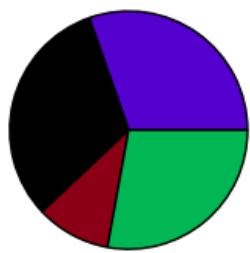
Discord Url: <https://discord.gg/YGsZTu>

Author: infiniteimoc (<https://tappedout.net/users/infiniteimoc>)

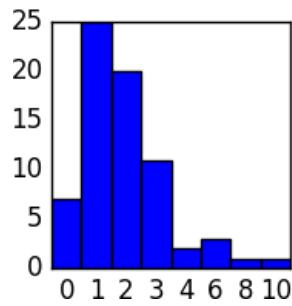
Commander(s): Thrasios, Triton Hero, Vial Smasher the Fierce

Color: UBRG (U: 24 30.4% B: 25 31.6% R: 8 10.1% G: 22 27.8%)

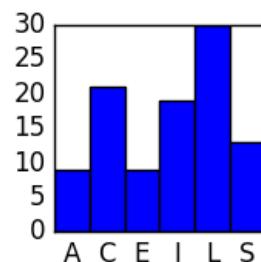
CMC: 2.03



(a) Mana Pie



(b) CMC Histogram



(c) Card Type Histogram

Figure 62: Nooze Reanimator

Decklist: Nooze Reanimator, Cockatrice Hash: 3buvi2e

Commander (2)	Instant (19)	Sorcery (13)
1x Thrasios, Triton Hero	1x Abrupt Decay	1x Buried Alive
1x Vial Smasher the Fierce	1x Brainstorm	1x Demonic Tutor
	1x Cabal Ritual	1x Exhume
Land (30)	1x Dark Ritual	1x Gitaxian Probe
1x Arid Mesa	1x Delay	1x Imperial Seal
1x Badlands	1x Dramatic Reversal	1x Life // Death
1x Bayou	1x Entomb	1x Ponder
1x Bloodstained Mire	1x Fire Covenant	1x Preordain
1x Breeding Pool	1x Frantic Search	1x Reanimate
1x City of Brass	1x Mana Drain	1x Timetwister
1x Command Tower	1x Mystical Tutor	1x Toxic Deluge
1x Flooded Strand	1x Nature's Claim	1x Wheel of Fortune
1x Forbidden Orchard	1x Negate	1x Windfall
1x Forest	1x Noxious Revival	
1x Gaea's Cradle	1x Pact of Negation	Artifact (8)
1x Island	1x Reality Shift	1x Chrome Mox
1x Mana Confluence	1x Swan Song	1x Isochron Scepter
1x Marsh Flats	1x Vampiric Tutor	1x Lion's Eye Diamond
1x Misty Rainforest	1x Winds of Rebuke	1x Lotus Petal
1x Overgrown Tomb		1x Mana Crypt
1x Polluted Delta	Enchantment (9)	1x Mana Vault
1x Scalding Tarn	1x Animate Dead	1x Mox Diamond
1x Steam Vents	1x Carpet of Flowers	1x Sol Ring
1x Stomping Ground	1x Dance of the Dead	
1x Swamp	1x Mystic Remora	Creature (19)
1x Taiga	1x Necromancy	1x Arbor Elf
1x Tarnished Citadel	1x Survival of the Fittest	1x Birds of Paradise
1x Tropical Island	1x Sylvan Library	1x Bloom Tender
1x Underground Sea	1x Utopia Sprawl	1x Consecrated Sphinx
1x Verdant Catacombs	1x Wild Growth	1x Dark Confidant
1x Volcanic Island		1x Deathrite Shaman
1x Watery Grave		1x Devoted Druid
1x Windswept Heath		1x Elvish Mystic
1x Wooded Foothills		1x Eternal Witness
		1x Fyndhorn Elves
		1x Jace, Vryn's Prodigy
		1x Jin-Gitaxias, Core Augur
		1x Llanowar Elves
		1x Morselhoarder
		1x Necrotic Ooze
		1x Notion Thief
		1x Razaketh, the Foulblooded
		1x Walking Ballista
		1x Worldgorger Dragon

4.40 Opus Thief

Deck Link: <http://tappedout.net/mtg-decks/opus-thief/>

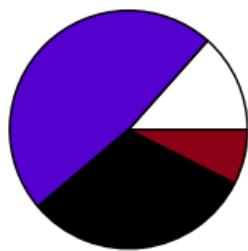
Discord Url: <https://discord.gg/rSCVQB7>

Author: ShaperSavant (<https://tappedout.net/users/ShaperSavant>)

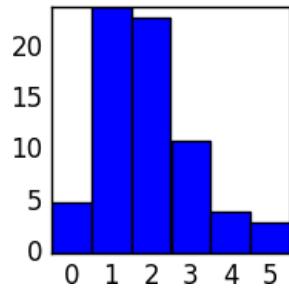
Commander(s): Kraum, Ludevic's Opus, Tymna the Weaver

Color: WUBR (W: 9 13.4% U: 32 47.8% B: 21 31.3% R: 5 7.5%)

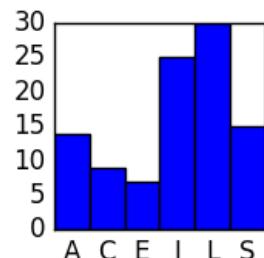
CMC: 1.91



(a) Mana Pie



(b) CMC Histogram



(c) Card Type Histogram

Figure 63: Opus Thief

Decklist: Opus Thief, Cockatrice Hash: uqd80i09

Commander (2)

- 1x Kraum, Ludevic's Opus
1x Tymna the Weaver

Land (30)

- 1x Ancient Tomb
1x Arid Mesa
1x Badlands
1x Bloodstained Mire
1x City of Brass
1x Command Tower
1x Exotic Orchard
1x Flooded Strand
1x Gemstone Caverns
1x Hallowed Fountain
1x Mana Confluence
1x Marsh Flats
1x Misty Rainforest
1x Morphic Pool
1x Polluted Delta
1x Scalding Tarn
1x Scrubland
1x Sea of Clouds
1x Snow-Covered Island
1x Steam Vents
1x Tarnished Citadel
1x Tundra
1x Underground River
1x Underground Sea
1x Urborg, Tomb of Yawgmoth
1x Verdant Catacombs
1x Volcanic Island
1x Watery Grave
1x Windswept Heath
1x Wooded Foothills

Instant (25)

- 1x Ad Nauseam
1x Angel's Grace
1x Brainstorm
1x Cabal Ritual
1x Chain of Vapor
1x Counterspell
1x Dark Ritual
1x Delay
1x Demonic Consultation
1x Dispel
1x Enlightened Tutor
1x Flusterstorm
1x Force of Will
1x Lim-Dûl's Vault
1x Mana Drain
1x Mental Misstep
1x Mystical Tutor
1x Negate
1x Pact of Negation
1x Silence
1x Spell Pierce
1x Swan Song
1x Swords to Plowshares
1x Tainted Pact
1x Vampiric Tutor

Enchantment (7)

- 1x Copy Artifact
1x Mystic Remora
1x Necropotence
1x Rhystic Study
1x Smothering Tithe
1x Suppression Field
1x Waste Not

Sorcery (15)

- 1x Demonic Tutor
1x Gitaxian Probe
1x Imperial Seal
1x Mnemonic Betrayal
1x Ponder
1x Preordain
1x Pyroclasm
1x Rolling Earthquake
1x Timetwister
1x Toxic Deluge
1x Wheel of Fortune
1x Whispering Madness
1x Windfall
1x Winds of Change
1x Yawgmoth's Will

Artifact (14)

- 1x Azorius Signet
1x Chrome Mox
1x Cursed Totem
1x Dimir Signet
1x Fellwar Stone
1x Grim Monolith
1x Izzet Signet
1x Lotus Petal
1x Mana Crypt
1x Mana Vault
1x Mox Diamond
1x Sol Ring
1x Talisman of Dominance
1x Talisman of Progress

Creature (7)

- 1x Alms Collector
1x Aven Mindcensor
1x Baral, Chief of Compliance
1x Dark Confidant
1x Gilded Drake
1x Laboratory Maniac
1x Notion Thief

4.41 Paradox Arcum

Deck Link: <https://tappedout.net/mtg-decks/03-02-17-paradox-arcum/>

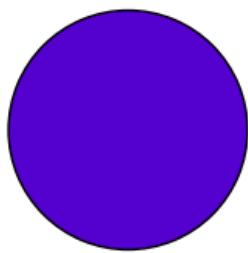
Discord Url: N/A

Author: LabManiac_Sigi (https://tappedout.net/users/LabManiac_Sigi)

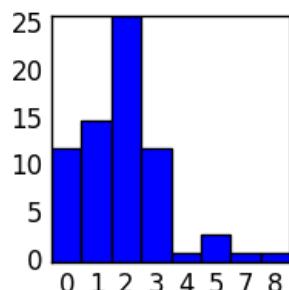
Commander(s): Arcum Dagsson

Color: U (U: 34 100.0%)

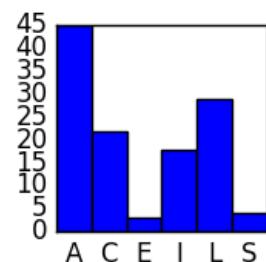
CMC: 1.93



(a) Mana Pie



(b) CMC Histogram



(c) Card Type Histogram

Figure 64: Paradox Arcum

Decklist: Paradox Arcum, Cockatrice Hash: 516ob1pu

Commander (1)	Instant (18)	Artifact (24)
1x Arcum Dagsson	1x Brainstorm 1x Chain of Vapor 1x Cyclonic Rift 1x Delay 1x Dig Through Time 1x Flusterstorm 1x Force of Will 1x Hurkyl's Recall 1x Impulse 1x Into the Roil 1x Mana Drain 1x Mana Leak 1x Mental Misstep 1x Mystical Tutor 1x Pact of Negation 1x Spell Pierce 1x Swan Song 1x Whir of Invention	1x Basalt Monolith 1x Chrome Mox 1x Citanul Flute 1x Everflowing Chalice 1x Fellwar Stone 1x Grim Monolith 1x Guardian Idol 1x Lightning Greaves 1x Lotus Petal 1x Mana Crypt 1x Mana Vault 1x Mox Diamond 1x Mox Opal 1x Paradox Engine 1x Pithing Needle 1x Prismatic Lens 1x Rings of Brightearth 1x Sensei's Divining Top 1x Sky Diamond 1x Sol Ring 1x Spine of Ish Sah 1x Staff of Domination 1x Thought Vessel 1x Thousand-Year Elixir
Land (29)		
1x Academy Ruins 1x Ancient Tomb 1x Blinkmoth Nexus 1x Buried Ruin 1x Cavern of Souls 1x City of Traitors 1x Flooded Strand 1x Inkmoth Nexus 14x Island 1x Minamo, School at Water's Edge 1x Mishra's Factory 1x Mishra's Workshop 1x Misty Rainforest 1x Polluted Delta 1x Scalding Tarn 1x Seat of the Synod		
Enchantment (3)		
1x Back to Basics 1x Mystic Remora 1x Power Artifact		
Sorcery (4)		
1x Ponder 1x Preordain 1x Timetwister 1x Transmute Artifact		
		Creature (21)
		1x Arcbound Ravager 1x Etherium Sculptor 1x Hangarback Walker 1x Hedron Crawler 1x Hope of Ghirapur 1x Junk Diver 1x Manakin 1x Memnite 1x Metalworker 1x Myr Retriever 1x Ornithopter 1x Palladium Myr 1x Phyrexian Revoker 1x Plague Myr 1x Scrap Trawler 1x Shield Sphere 1x Shimmer Myr 1x Silver Myr 1x Snapcaster Mage 1x Spellskite 1x Walking Ballista

4.42 Paradox Scepter Thrasios

Deck Link: <http://tappedout.net/mtg-decks/paradox-scepter-thrasios-1/>

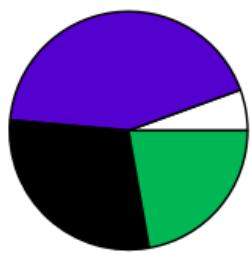
Discord Url: <https://discord.gg/DtG4djy>

Author: AlwaysSleepy (<https://tappedout.net/users/AlwaysSleepy>)

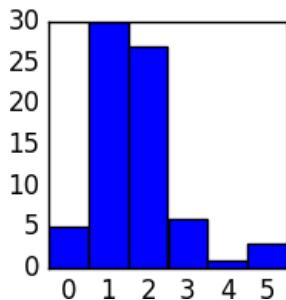
Commander(s): Thrasios, Triton Hero, Tymna the Weaver

Color: WUBG (W: 4 5.6% U: 31 43.1% B: 21 29.2% G: 16 22.2%)

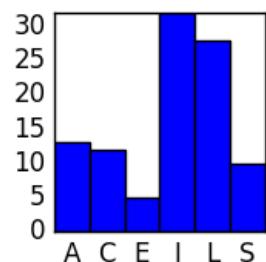
CMC: 1.68



(a) Mana Pie



(b) CMC Histogram



(c) Card Type Histogram

Figure 65: Paradox Scepter Thrasios

Decklist: Paradox Scepter Thrasios, Cockatrice Hash: 0m8tseol

Commander (2)	Instant (32)	Enchantment (5)
1x Thrasios, Triton Hero	1x Abrupt Decay	1x Carpet of Flowers
1x Tymna the Weaver	1x Ad Nauseam	1x Copy Artifact
	1x Angel's Grace	1x Mystic Remora
Land (28)	1x Assassin's Trophy	1x Necropotence
1x Ancient Tomb	1x Brainstorm	1x Sylvan Library
1x Bayou	1x Cabal Ritual	
1x Bloodstained Mire	1x Chain of Vapor	Sorcery (10)
1x Breeding Pool	1x Counterspell	1x Demonic Tutor
1x City of Brass	1x Cyclonic Rift	1x Gitaxian Probe
1x Command Tower	1x Dark Ritual	1x Imperial Seal
1x Exotic Orchard	1x Delay	1x Ponder
1x Flooded Strand	1x Dispel	1x Preordain
1x Forbidden Orchard	1x Dramatic Reversal	1x Regrowth
1x Gemstone Caverns	1x Enlightened Tutor	1x Timetwister
1x Gemstone Mine	1x Flusterstorm	1x Toxic Deluge
1x Mana Confluence	1x Force of Will	1x Windfall
1x Marsh Flats	1x Lim-Dûl's Vault	1x Yawgmoth's Will
1x Misty Rainforest	1x Mana Drain	
1x Morphic Pool	1x Mental Misstep	Artifact (13)
1x Polluted Delta	1x Muddle the Mixture	1x Chrome Mox
1x Savannah	1x Mystical Tutor	1x Fellwar Stone
1x Scalding Tarn	1x Nature's Claim	1x Grim Monolith
1x Snow-Covered Island	1x Negate	1x Isochron Scepter
1x Tarnished Citadel	1x Noxious Revival	1x Lotus Petal
1x Tropical Island	1x Pact of Negation	1x Mana Crypt
1x Tundra	1x Plunge into Darkness	1x Mana Vault
1x Underground Sea	1x Silence	1x Mox Diamond
1x Verdant Catacombs	1x Spell Pierce	1x Paradox Engine
1x Watery Grave	1x Swan Song	1x Sensei's Divining Top
1x Windswept Heath	1x Tainted Pact	1x Simic Signet
1x Wooded Foothills	1x Vampiric Tutor	1x Sol Ring
1x Yavimaya Coast	1x Winds of Rebuke	1x Talisman of Dominance
		Creature (10)
		1x Arbor Elf
		1x Avacyn's Pilgrim
		1x Birds of Paradise
		1x Bloom Tender
		1x Dark Confidant
		1x Deathrite Shaman
		1x Elves of Deep Shadow
		1x Noble Hierarch
		1x Notion Thief
		1x Priest of Titania

4.43 Paradox Sisay

Deck Link: <https://tappedout.net/mtg-decks/sisay-staxcombo/>

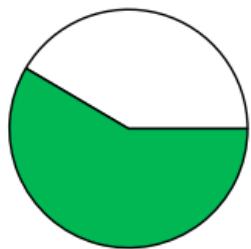
Discord Url: <https://discord.gg/QPYtV8m>

Author: biopouvoir (<https://tappedout.net/users/biopouvoir>)

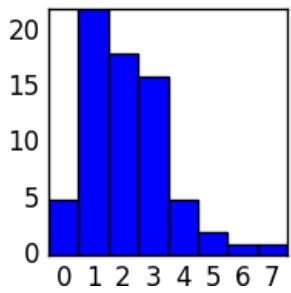
Commander(s): Captain Sisay

Color: WG (W: 27 41.5% G: 38 58.5%)

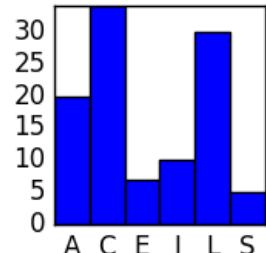
CMC: 2.13



(a) Mana Pie



(b) CMC Histogram



(c) Card Type Histogram

Figure 66: Paradox Sisay

Decklist: Paradox Sisay, Cockatrice Hash: mor62pgo

Commander (1)	Instant (10)	Creature (32)
1x Captain Sisay	1x Beast Within 1x Chord of Calling 1x Crop Rotation 1x Eladamri's Call 1x Enlightened Tutor 1x Nature's Claim 1x Noxious Revival 1x Path to Exile 1x Swords to Plowshares 1x Worldly Tutor	1x Arbor Elf 1x Avacyn's Pilgrim 1x Aven Mindcensor 1x Azusa, Lost but Seeking 1x Birds of Paradise 1x Bloom Tender 1x Boreal Druid 1x Dosan the Falling Leaf 1x Eidolon of Rhetoric 1x Elesh Norn, Grand Cenobite 1x Elvish Mystic 1x Ethersworn Canonist 1x Fiend Hunter 1x Fyndhorn Elves 1x Hokori, Dust Drinker 1x Hushwing Gryff 1x Kamahl, Fist of Krosa 1x Kataki, War's Wage 1x Linvala, Keeper of Silence 1x Llanowar Elves 1x Manglehorn 1x Mother of Runes 1x Phyrexian Revoker 1x Priest of Titania 1x Qasali Pridemage 1x Quirion Ranger 1x Rishkar, Peema Renegade 1x Selvala, Explorer Returned 1x Spirit of the Labyrinth 1x Sylvan Safekeeper 1x Thalia, Guardian of Thraben 1x Yisan, the Wanderer Bard
Land (30)	Sorcery (5)	
1x Ancient Tomb 1x Arid Mesa 1x Cavern of Souls 1x Command Tower 1x Dryad Arbor 1x Eiganjo Castle 1x Flagstones of Trokair 1x Flooded Strand 3x Forest 1x Gaea's Cradle 1x Gemstone Caverns 1x Horizon Canopy 1x Inventors' Fair 1x Marsh Flats 1x Mistveil Plains 1x Misty Rainforest 1x Okina, Temple to the Grandfathers 1x Pendelhaven 2x Plains 1x Savannah 1x Strip Mine 1x Temple Garden 1x Verdant Catacombs 1x Windswept Heath 1x Wooded Bastion 1x Wooded Foothills 1x Yavimaya Hollow	1x Armageddon 1x Green Sun's Zenith 1x Land Grant 1x Ravages of War 1x Urza's Ruinous Blast	
Enchantment (4)	Artifact (18)	
1x Carpet of Flowers 1x Stony Silence 1x Survival of the Fittest 1x Sylvan Library	1x Bow of Nylea 1x Chrome Mox 1x Grafdigger's Cage 1x Lightning Greaves 1x Mana Crypt 1x Mana Vault 1x Mox Amber 1x Mox Diamond 1x Mox Opal 1x Null Rod 1x Paradox Engine 1x Sol Ring 1x Sphere of Resistance 1x Static Orb 1x Thorn of Amethyst 1x Thousand-Year Elixir 1x Trinisphere 1x Winter Orb	

4.44 Rad Farm

Deck Link: <http://tappedout.net/mtg-decks/rad-farm/>

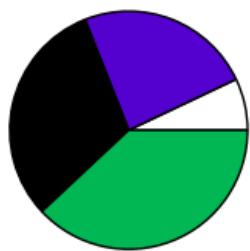
Discord Url: <https://discord.gg/xbNX4ex>

Author: ShaperSavant (<https://tappedout.net/users/ShaperSavant>)

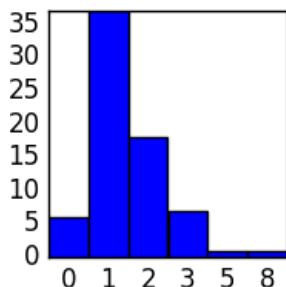
Commander(s): Thrasios, Triton Hero, Tymna the Weaver

Color: WUBG (W: 5 7.0% U: 17 23.9% B: 22 31.0% G: 27 38.0%)

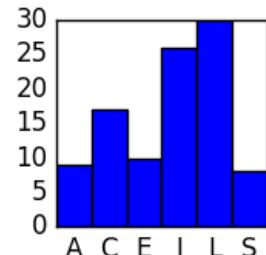
CMC: 1.53



(a) Mana Pie



(b) CMC Histogram



(c) Card Type Histogram

Figure 67: Rad Farm

Decklist: Rad Farm, Cockatrice Hash: 7u11mgsv

Commander (2)	Instant (26)	Enchantment (10)
1x Thrasios, Triton Hero	1x Abrupt Decay	1x Animate Dead
1x Tymna the Weaver	1x Ad Nauseam	1x Carpet of Flowers
	1x Angel's Grace	1x Earthcraft
Land (30)	1x Assassin's Trophy	1x Exploration
1x Ancient Tomb	1x Brainstorm	1x Intruder Alarm
1x Bayou	1x Cabal Ritual	1x Mystic Remora
1x Bloodstained Mire	1x Chain of Vapor	1x Squirrel Nest
1x Breeding Pool	1x Crop Rotation	1x Sylvan Library
1x City of Brass	1x Culling the Weak	1x Utopia Sprawl
1x Command Tower	1x Dark Ritual	1x Wild Growth
1x Exotic Orchard	1x Delay	
1x Flooded Strand	1x Dispel	Artifact (9)
1x Forbidden Orchard	1x Dramatic Reversal	1x Chrome Mox
1x Forest	1x Enlightened Tutor	1x Grim Monolith
1x Gaea's Cradle	1x Entomb	1x Isochron Scepter
1x Gemstone Caverns	1x Flusterstorm	1x Lion's Eye Diamond
1x Mana Confluence	1x Frantic Search	1x Lotus Petal
1x Marsh Flats	1x Lim-Dûl's Vault	1x Mana Crypt
1x Misty Rainforest	1x Mental Misstep	1x Mana Vault
1x Morphic Pool	1x Mystical Tutor	1x Mox Diamond
1x Overgrown Tomb	1x Noxious Revival	1x Sol Ring
1x Polluted Delta	1x Pact of Negation	
1x Savannah	1x Silence	Creature (15)
1x Scalding Tarn	1x Spell Pierce	1x Arbor Elf
1x Scrubland	1x Swan Song	1x Avacyn's Pilgrim
1x Snow-Covered Forest	1x Vampiric Tutor	1x Birds of Paradise
1x Tarnished Citadel		1x Blisterpod
1x Tropical Island	Sorcery (8)	1x Bloom Tender
1x Tundra	1x Demonic Tutor	1x Children of Korlis
1x Underground Sea	1x Diabolic Intent	1x Dark Confidant
1x Verdant Catacombs	1x Imperial Seal	1x Deathrite Shaman
1x Watery Grave	1x Life // Death	1x Elves of Deep Shadow
1x Windswept Heath	1x Ponder	1x Elvish Mystic
1x Wooded Foothills	1x Regrowth	1x Fyndhorn Elves
	1x Timetwister	1x Llanowar Elves
	1x Yawgmoth's Will	1x Noble Hierarch
		1x Priest of Titania
		1x Razaketh, the Foulblooded

4.45 Rashmi Control

Deck Link: <http://tappedout.net/mtg-decks/infinite-eternities-that-also-last-a-long-time/>

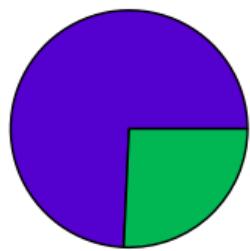
Discord Url: <https://discord.gg/UQbRkHx>

Author: Nakhla (<https://tappedout.net/users/Nakhla>)

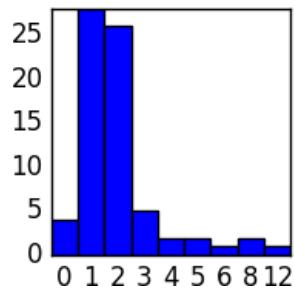
Commander(s): Rashmi, Eternities Crafter

Color: UG (U: 52 74.3% G: 18 25.7%)

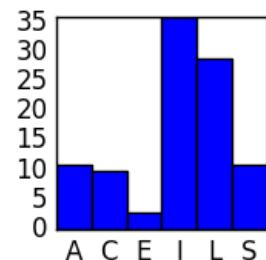
CMC: 2.07



(a) Mana Pie



(b) CMC Histogram



(c) Card Type Histogram

Figure 68: Rashmi Control

Decklist: Rashmi Control, Cockatrice Hash: u3d940b3

Commander (1)	Artifact (11)	Instant (36)
1x Rashmi, Eternities Crafter	1x Chrome Mox 1x Fellwar Stone 1x Grim Monolith 1x Isochron Scepter 1x Mana Crypt 1x Mana Vault 1x Mox Diamond 1x Sapphire Medallion 1x Sensei's Divining Top 1x Simic Signet 1x Sol Ring	1x Beast Within 1x Brainstorm 1x Chain of Vapor 1x Counterspell 1x Cyclonic Rift 1x Delay 1x Dig Through Time 1x Dispel 1x Dramatic Reversal 1x Fact or Fiction 1x Flusterstorm 1x Force of Will 1x Frantic Search 1x Hurkyl's Recall 1x Impulse 1x Into the Roil 1x Intuition 1x Mana Drain 1x Mana Leak 1x Mental Misstep 1x Muddle the Mixture 1x Mystical Tutor 1x Natural State 1x Nature's Claim 1x Negate 1x Noxious Revival 1x Pact of Negation 1x Pongify 1x Prohibit 1x Pull from Tomorrow 1x Rapid Hybridization 1x Reality Shift 1x Spell Pierce 1x Stroke of Genius 1x Submerge 1x Swan Song
Land (29)		
1x Ancient Tomb 1x Breeding Pool 1x Command Tower 1x Flooded Grove 1x Flooded Strand 1x Hinterland Harbor 1x Misty Rainforest 1x Polluted Delta 1x Scalding Tarn 5x Snow-Covered Forest 10x Snow-Covered Island 1x Tropical Island 1x Verdant Catacombs 1x Windswept Heath 1x Wooded Foothills 1x Yavimaya Coast		
Enchantment (3)	Creature (9)	
1x Carpet of Flowers 1x Mystic Remora 1x Sylvan Library	1x Arbor Elf 1x Baral, Chief of Compliance 1x Birds of Paradise 1x Boreal Druid 1x Elvish Mystic 1x Fyndhorn Elves 1x Llanowar Elves 1x Priest of Titania 1x Snapcaster Mage	
Sorcery (11)		
1x Enter the Infinite 1x Gitaxian Probe 1x Manifold Insights 1x Merchant Scroll 1x Nature's Lore 1x Ponder 1x Preordain 1x Seasons Past 1x Sleight of Hand 1x Three Visits 1x Treasure Cruise		

4.46 Razakats

Deck Link: <http://tappedout.net/mtg-decks/razakats/>

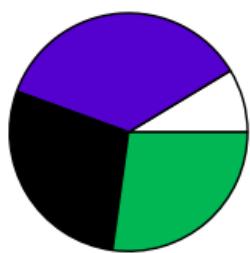
Discord Url: <https://discord.gg/sgJwnJj>

Author: ShaperSavant (<https://tappedout.net/users/ShaperSavant>)

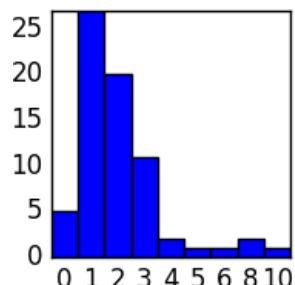
Commander(s): Thrasios, Triton Hero, Tymna the Weaver

Color: WUBG (W: 7 8.6% U: 29 35.8% B: 23 28.4% G: 22 27.2%)

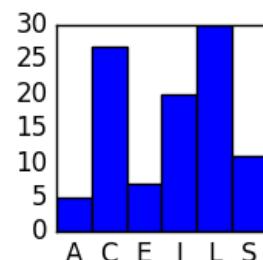
CMC: 2.07



(a) Mana Pie



(b) CMC Histogram



(c) Card Type Histogram

Figure 69: Razakats

Decklist: Razakats, Cockatrice Hash: rom7g5qr

Commander (2)	Instant (20)	Sorcery (11)
1x Thrasios, Triton Hero	1x Abrupt Decay	1x Careful Study
1x Tymna the Weaver	1x Assassin's Trophy	1x Chart a Course
Land (30)	1x Brainstorm	1x Demonic Tutor
1x Bayou	1x Dark Ritual	1x Diabolic Intent
1x Bloodstained Mire	1x Enlightened Tutor	1x Imperial Seal
1x Breeding Pool	1x Entomb	1x Life // Death
1x Cephalid Coliseum	1x Force of Will	1x Ponder
1x City of Brass	1x Frantic Search	1x Reanimate
1x Command Tower	1x Intuition	1x Timetwister
1x Exotic Orchard	1x Lim-Dûl's Vault	1x Toxic Deluge
1x Flooded Strand	1x Mana Drain	1x Windfall
1x Forbidden Orchard	1x Mental Misstep	Creature (25)
1x Gaea's Cradle	1x Mystical Tutor	1x Arbor Elf
1x Mana Confluence	1x Nature's Claim	1x Auriok Salvagers
1x Marsh Flats	1x Noxious Revival	1x Avacyn's Pilgrim
1x Misty Rainforest	1x Pact of Negation	1x Aven Mindcensor
1x Morphic Pool	1x Silence	1x Birds of Paradise
1x Overgrown Tomb	1x Swan Song	1x Blood Artist
1x Polluted Delta	1x Vampiric Tutor	1x Bloom Tender
1x Savannah	1x Winds of Rebuke	1x Consecrated Sphinx
1x Scalding Tarn	Enchantment (7)	1x Dark Confidant
1x Scrubland	1x Animate Dead	1x Deathrite Shaman
1x Snow-Covered Forest	1x Carpet of Flowers	1x Elves of Deep Shadow
1x Snow-Covered Island	1x Dance of the Dead	1x Elvish Mystic
1x Snow-Covered Swamp	1x Mystic Remora	1x Eternal Witness
1x Tarnished Citadel	1x Necromancy	1x Fyndhorn Elves
1x Tropical Island	1x Survival of the Fittest	1x Gilded Drake
1x Tundra	1x Sylvan Library	1x Jace, Vryn's Prodigy
1x Underground Sea	Artifact (5)	1x Jin-Gitaxias, Core Augur
1x Verdant Catacombs	1x Chrome Mox	1x Kederekt Leviathan
1x Watery Grave	1x Lion's Eye Diamond	1x Leonin Relic-Warder
1x Windswept Heath	1x Mana Crypt	1x Llanowar Elves
1x Wooded Foothills	1x Mox Diamond	1x Noble Hierarch
	1x Sol Ring	1x Notion Thief
		1x Priest of Titania
		1x Razaketh, the Foulblooded
		1x Spellseeker

4.47 SBT Grave Combos

Deck Link: <https://tappedout.net/mtg-decks/a-heart-three-sizes-too-small-turn-1-win-copy/>

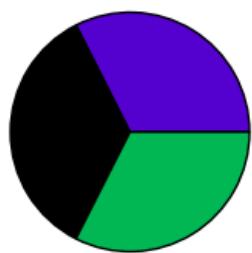
Discord Url: <https://discord.gg/7nUTaXa>

Author: Lilbrudder (<https://tappedout.net/users/Lilbrudder>)

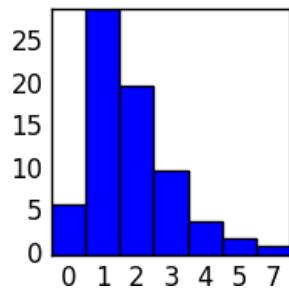
Commander(s): Sidisi, Brood Tyrant

Color: UBG (U: 25 32.5% B: 27 35.1% G: 25 32.5%)

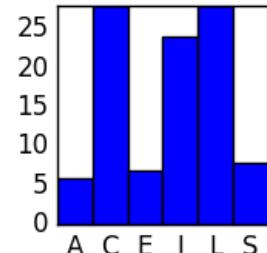
CMC: 1.83



(a) Mana Pie



(b) CMC Histogram



(c) Card Type Histogram

Figure 70: SBT Grave Combos

Decklist: SBT Grave Combos, Cockatrice Hash: m95bt32t

Commander (1)	Instant (24)	Sorcery (8)
1x Sidisi, Brood Tyrant	1x Abrupt Decay 1x Ad Nauseam 1x Brainstorm 1x Chain of Vapor 1x Dark Ritual 1x Dispel 1x Entomb 1x Flash 1x Flash of Insight 1x Flusterstorm 1x Force of Will 1x Lim-Dûl's Vault 1x Memory's Journey 1x Mental Misstep 1x Mystical Tutor 1x Nature's Claim 1x Noxious Revival 1x Pact of Negation 1x Shallow Grave 1x Spell Pierce 1x Swan Song 1x Tainted Pact 1x Vampiric Tutor 1x Worldly Tutor	1x Demonic Tutor 1x Diabolic Intent 1x Dread Return 1x Green Sun's Zenith 1x Imperial Seal 1x Ponder 1x Reanimate 1x Windfall
Land (28)		Creature (27)
1x Ancient Tomb 1x Bayou 1x Bloodstained Mire 1x Blooming Marsh 1x Breeding Pool 1x Cavern of Souls 1x Cephalid Coliseum 1x City of Brass 1x Command Tower 1x Flooded Strand 1x Forbidden Orchard 1x Gemstone Caverns 1x Mana Confluence 1x Marsh Flats 1x Misty Rainforest 1x Overgrown Tomb 1x Polluted Delta 1x Scalding Tarn 1x Tarnished Citadel 1x Tropical Island 1x Underground River 1x Underground Sea 1x Urborg, Tomb of Yawgmoth 1x Verdant Catacombs 1x Watery Grave 1x Windswept Heath 1x Wooded Foothills 1x Yavimaya Coast		1x Apprentice Necromancer 1x Arbor Elf 1x Birds of Paradise 1x Blighted Bat 1x Cephalid Inkshrouder 1x Channeler Initiate 1x Dark Confidant 1x Deathrite Shaman 1x Devoted Druid 1x Elves of Deep Shadow 1x Elvish Mystic 1x Eternal Scourge 1x Eternal Witness 1x Fatestitcher 1x Fyndhorn Elves 1x Gilded Drake 1x Hapless Researcher 1x Hermit Druid 1x Jace, Vryn's Prodigy 1x Laboratory Maniac 1x Llanowar Elves 1x Mogis's Marauder 1x Narcomoeba 1x Necrotic Ooze 1x Protean Hulk 1x Walking Ballista 1x Wall of Roots
Artifact (5)	Enchantment (7)	
1x Chrome Mox 1x Lotus Petal 1x Mana Crypt 1x Mox Diamond 1x Sol Ring	1x Carpet of Flowers 1x Food Chain 1x Mystic Remora 1x Necromancy 1x Necropotence 1x Survival of the Fittest 1x Sylvan Library	

4.48 Scepter Control

Deck Link: <http://tappedout.net/mtg-decks/20-04-17-scepter-control/>

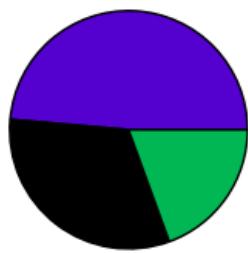
Discord Url: <https://discord.gg/ERMTuyP>

Author: ShaperSavant (<https://tappedout.net/users/ShaperSavant>)

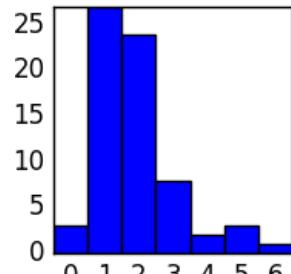
Commander(s): Tasigur, the Golden Fang

Color: UBG (U: 35 48.6% B: 23 31.9% G: 14 19.4%)

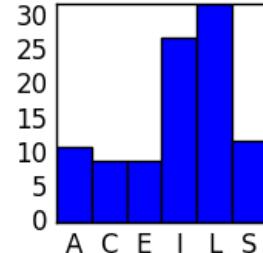
CMC: 1.88



(a) Mana Pie



(b) CMC Histogram



(c) Card Type Histogram

Figure 71: Scepter Control

Decklist: Scepter Control, Cockatrice Hash: gaehrj2i

Commander (1)	Instant (27)	Enchantment (9)
1x Tasigur, the Golden Fang	1x Abrupt Decay 1x Ad Nauseam 1x Assassin's Trophy 1x Brainstorm 1x Chain of Vapor 1x Counterspell 1x Cyclonic Rift 1x Delay 1x Dispel 1x Dramatic Reversal 1x Flusterstorm 1x Force of Will 1x Impulse 1x Into the Roil 1x Lim-Dûl's Vault 1x Mana Drain 1x Mental Misstep 1x Mystical Tutor 1x Nature's Claim 1x Negate 1x Noxious Revival 1x Pongify 1x Rapid Hybridization 1x Reality Shift 1x Stubborn Denial 1x Swan Song 1x Vampiric Tutor	1x Carpet of Flowers 1x Copy Artifact 1x Mirri's Guile 1x Mystic Remora 1x Necropotence 1x Rhystic Study 1x Sylvan Library 1x Utopia Sprawl 1x Wild Growth
Land (32)		Sorcery (12)
1x Ancient Tomb		1x Demonic Tutor 1x Gitaxian Probe 1x Grim Tutor 1x Imperial Seal 1x Massacre 1x Ponder 1x Praetor's Grasp 1x Preordain 1x Timetwister 1x Toxic Deluge 1x Windfall 1x Yawgmoth's Will
1x Bayou		
1x Bloodstained Mire		
1x Breeding Pool		
1x Cephalid Coliseum		
1x City of Brass		
1x Command Tower		
1x Exotic Orchard		
1x Flooded Strand		
1x Forbidden Orchard		
1x Llanowar Wastes		
1x Mana Confluence		
1x Marsh Flats		
1x Misty Rainforest		
1x Morphic Pool		
1x Overgrown Tomb		
1x Polluted Delta		
1x Scalding Tarn		
1x Snow-Covered Forest		
4x Snow-Covered Island		
1x Snow-Covered Swamp		
1x Tropical Island		Artifact (11)
1x Underground River		1x Chrome Mox 1x Dimir Signet 1x Fellwar Stone 1x Golgari Signet 1x Isochron Scepter 1x Mana Crypt 1x Mox Diamond 1x Sensei's Divining Top 1x Simic Signet 1x Sol Ring 1x Talisman of Dominance
1x Underground Sea		
1x Verdant Catacombs		
1x Watery Grave		
1x Windswept Heath		
1x Wooded Foothills		
1x Yavimaya Coast		
		Creature (8)
		1x Arbor Elf 1x Baral, Chief of Compliance 1x Birds of Paradise 1x Dark Confidant 1x Deathrite Shaman 1x Gilded Drake 1x Notion Thief 1x Seedborn Muse

4.49 Scion Reanimator

Deck Link: <https://tappedout.net/mtg-decks/18-12-18-scion-reanimator/>

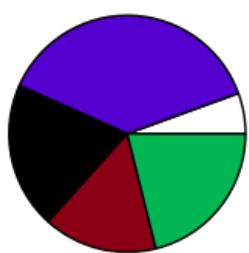
Discord Url: <https://discord.gg/xbNX4ex>

Author: ShaperSavant (<https://tappedout.net/users/ShaperSavant>)

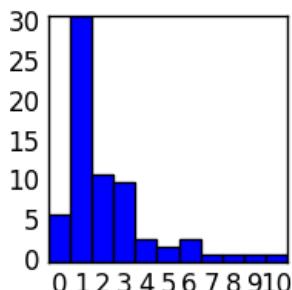
Commander(s): Scion of the Ur-Dragon

Color: WUBRG (W: 5 5.6% U: 34 37.8% B: 18 20.0% R: 14 15.6% G: 19 21.1%)

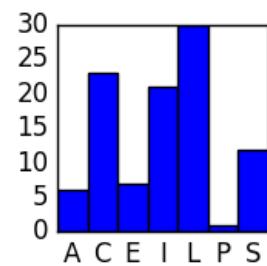
CMC: 2.24



(a) Mana Pie



(b) CMC Histogram



(c) Card Type Histogram

Figure 72: Scion Reanimator

Decklist: Scion Reanimator, Cockatrice Hash: vdd9lctg

Commander (1)	Instant (21)	Sorcery (12)
1x Scion of the Ur-Dragon	1x Brainstorm 1x Dark Ritual 1x Dispel 1x Enlightened Tutor 1x Entomb 1x Fire Covenant 1x Flusterstorm 1x Force of Will 1x Frantic Search 1x Intuition 1x Izzet Charm 1x Mana Drain 1x Mental Misstep 1x Mystical Tutor 1x Nature's Claim 1x Noxious Revival 1x Pact of Negation 1x Pongify 1x Swan Song 1x Vampiric Tutor 1x Winds of Rebuke	1x Careful Study 1x Chart a Course 1x Demonic Tutor 1x Faithless Looting 1x Imperial Seal 1x Life // Death 1x Ponder 1x Preordain 1x Reanimate 1x Timetwister 1x Wheel of Fortune 1x Windfall
Land (30)		Creature (22)
1x Arid Mesa 1x Badlands 1x Bayou 1x Bloodstained Mire 1x Breeding Pool 1x City of Brass 1x Command Tower 1x Exotic Orchard 1x Flooded Strand 1x Forbidden Orchard 1x Mana Confluence 1x Marsh Flats 1x Misty Rainforest 1x Morphic Pool 1x Polluted Delta 1x Savannah 1x Scalding Tarn 1x Scrubland 1x Snow-Covered Island 1x Taiga 1x Tarnished Citadel 1x Tropical Island 1x Tundra 1x Underground River 1x Underground Sea 1x Verdant Catacombs 1x Volcanic Island 1x Watery Grave 1x Windswept Heath 1x Wooded Foothills	1x Alms Collector 1x Arbor Elf 1x Auriok Salvagers 1x Avacyn's Pilgrim 1x Birds of Paradise 1x Consecrated Sphinx 1x Deathrite Shaman 1x Dragon Mage 1x Elves of Deep Shadow 1x Elvish Mystic 1x Eternal Witness 1x Fyndhorn Elves 1x Gilded Drake 1x Jace, Vryn's Prodigy 1x Jin-Gitaxias, Core Augur 1x Llanowar Elves 1x Niv-Mizzet, Dracogenius 1x Noble Hierarch 1x Notion Thief 1x Razaketh, the Foulblooded 1x The Ur-Dragon 1x Worldgorger Dragon	
Planeswalker (1)	Enchantment (7)	
1x Dack Fayden	1x Animate Dead 1x Carpet of Flowers 1x Dance of the Dead 1x Mystic Remora 1x Necromancy 1x Survival of the Fittest 1x Sylvan Library	
	Artifact (6)	
	1x Chrome Mox 1x Lion's Eye Diamond 1x Lotus Petal 1x Mana Crypt 1x Mox Diamond 1x Sol Ring	

4.50 Seasons Pastigur

Deck Link: <http://tappedout.net/mtg-decks/tasigur-seasons-past-season-pastigur/>

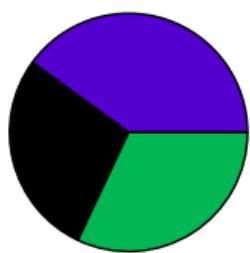
Discord Url: <https://discord.gg/ERMTuyP>

Author: LabManiac_Cameron (https://tappedout.net/users/LabManiac_Cameron)

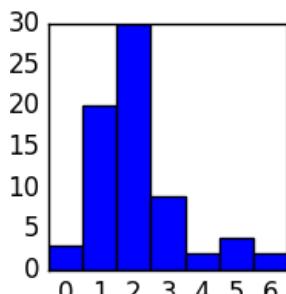
Commander(s): Tasigur, the Golden Fang

Color: UBG (U: 30 40.0% B: 21 28.0% G: 24 32.0%)

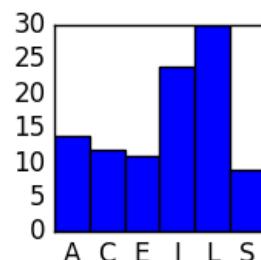
CMC: 2.10



(a) Mana Pie



(b) CMC Histogram



(c) Card Type Histogram

Figure 73: Seasons Pastigur

Decklist: Seasons Pastigur, Cockatrice Hash: gu5egd2a

Commander (1)	Instant (24)	Enchantment (11)
1x Tasigur, the Golden Fang	1x Abrupt Decay 1x Ad Nauseam 1x Assassin's Trophy 1x Beast Within 1x Brainstorm 1x Counterspell 1x Crop Rotation 1x Cyclonic Rift 1x Dimir Charm 1x Dramatic Reversal 1x Flusterstorm 1x Force of Will 1x Intuition 1x Lim-Dûl's Vault 1x Mana Drain 1x Mission Briefing 1x Noxious Revival 1x Pact of Negation 1x Rapid Hybridization 1x Reality Shift 1x Shadow of Doubt 1x Stubborn Denial 1x Swan Song 1x Vampiric Tutor	1x Carpet of Flowers 1x Chains of Mephistopheles 1x Copy Artifact 1x Counterbalance 1x Exploration 1x Freed from the Real 1x Mystic Remora 1x Pernicious Deed 1x Search for Azcanta 1x Sylvan Library 1x Utopia Sprawl
Land (30)		Artifact (14)
1x Barren Moor 1x Bayou 1x Bloodstained Mire 1x Bojuka Bog 1x Breeding Pool 1x Cephalid Coliseum 1x City of Brass 1x Command Tower 1x Flooded Strand 1x Forest 1x Island 1x Mana Confluence 1x Marsh Flats 1x Misty Rainforest 1x Overgrown Tomb 1x Polluted Delta 1x Reflecting Pool 1x Scalding Tarn 1x Strip Mine 1x Sunken Ruins 1x Swamp 1x Tranquil Thicket 1x Tropical Island 1x Twilight Mire 1x Underground Sea 1x Urborg, Tomb of Yawgmoth 1x Verdant Catacombs 1x Watery Grave 1x Windswept Heath 1x Wooded Foothills		1x Aetherflux Reservoir 1x Dimir Signet 1x Fellwar Stone 1x Grafdigger's Cage 1x Isochron Scepter 1x Mana Crypt 1x Mana Vault 1x Mox Diamond 1x Paradox Engine 1x Sensei's Divining Top 1x Simic Signet 1x Sol Ring 1x Talisman of Dominance 1x Thought Vessel
	Sorcery (9)	Creature (11)
	1x Demonic Tutor 1x Imperial Seal 1x Life from the Loam 1x Praetor's Grasp 1x Regrowth 1x Seasons Past 1x Timetwister 1x Toxic Deluge 1x Yawgmoth's Will	1x Arbor Elf 1x Birds of Paradise 1x Bloom Tender 1x Dark Confidant 1x Deathrite Shaman 1x Gilded Drake 1x Notion Thief 1x Priest of Titania 1x Riftsweeper 1x Runic Armasaur 1x Seedborn Muse

4.51 Selvala Brostorm

Deck Link: <https://tappedout.net/mtg-decks/selvala-brostorm/>

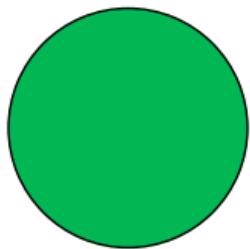
Discord Url: <https://discord.gg/7Bj3wuS>

Author: asm (<https://tappedout.net/users/asm>)

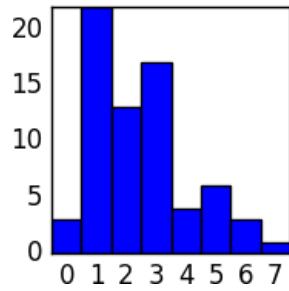
Commander(s): Selvala, Heart of the Wilds

Color: G (G: 78 100.0%)

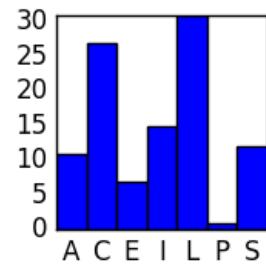
CMC: 2.46



(a) Mana Pie



(b) CMC Histogram



(c) Card Type Histogram

Figure 74: Selvala Brostorm

Decklist: Selvala Brostorm, Cockatrice Hash: a4cpo95s

Commander (1)	Sorcery (12)	Creature (25)
1x Selvala, Heart of the Wilds	1x Eldritch Evolution 1x Genesis Wave 1x Green Sun's Zenith 1x Life's Legacy 1x Natural Order 1x Phytopurst 1x Primal Command 1x Rishkar's Expertise 1x Soul's Majesty 1x Tooth and Nail 1x Uncage the Menagerie 1x Weird Harvest	1x Arbor Elf 1x Birds of Paradise 1x Boreal Druid 1x Duskwatch Recruiter 1x Elvish Mystic 1x Eternal Witness 1x Fierce Empath 1x Fyndhorn Elves 1x Great Oak Guardian 1x Llanowar Elves 1x Lupine Prototype 1x Phyrexian Dreadnought 1x Phyrexian Soulgorgor 1x Priest of Titania 1x Quirion Ranger 1x Ravaging Riftwurm 1x Reclamation Sage 1x Scryb Ranger 1x Sheltering Ancient 1x Skullwinder 1x Somberwald Stag 1x Temur Sabertooth 1x Wirewood Symbiote 1x Woodland Bellower 1x Yisan, the Wanderer Bard
Land (31)		
1x Cavern of Souls 1x Dryad Arbor 1x Gaea's Cradle 1x Gemstone Caverns 1x Mouth of Ronom 1x Nykthos, Shrine to Nyx 24x Snow-Covered Forest 1x Wirewood Lodge		
Instant (15)	Artifact (8)	
1x Autumn's Veil 1x Beast Within 1x Benefactor's Draught 1x Berserk 1x Chord of Calling 1x Crop Rotation 1x Deglamer 1x Groundswell 1x Invigorate 1x Might of Old Krosa 1x Momentous Fall 1x Nature's Claim 1x Summoner's Pact 1x Vines of Vastwood 1x Worldly Tutor	1x Chrome Mox 1x Cloudstone Curio 1x Mana Crypt 1x Memory Jar 1x Paradox Engine 1x Sol Ring 1x Staff of Domination 1x Umbral Mantle	
Enchantment (7)		
1x Carpet of Flowers 1x Greater Good 1x Song of the Dryads 1x Survival of the Fittest 1x Sylvan Library 1x Utopia Sprawl 1x Wild Growth		
Planeswalker (1)		
1x Garruk, Primal Hunter		

4.52 Shimmer Zur

Deck Link: <https://tappedout.net/mtg-decks/ad-nauseam-doomsday-zur-2/>

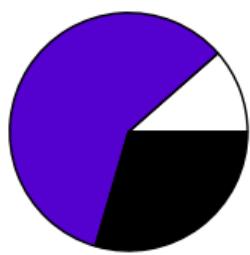
Discord Url: <https://discord.gg/UDgq2QF>

Author: Suasion (<https://tappedout.net/users/Suasion>)

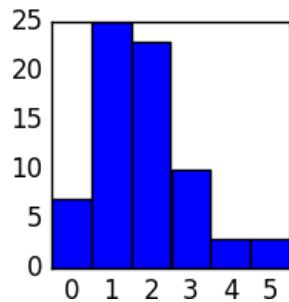
Commander(s): Zur the Enchanter

Color: WUB (W: 7 11.5% U: 36 59.0% B: 18 29.5%)

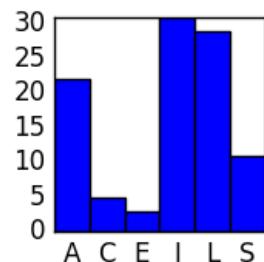
CMC: 1.80



(a) Mana Pie



(b) CMC Histogram



(c) Card Type Histogram

Figure 75: Shimmer Zur

Decklist: Shimmer Zur, Cockatrice Hash: cf45rvsl

Commander (1)	Instant (31)	Sorcery (11)
1x Zur the Enchanter	1x Ad Nauseam 1x Angel's Grace 1x Brainstorm 1x Cabal Ritual 1x Chain of Vapor 1x Counterspell 1x Cyclonic Rift 1x Dark Ritual 1x Delay 1x Dramatic Reversal 1x Enlightened Tutor 1x Flusterstorm 1x Force of Will 1x Frantic Search 1x Gush 1x High Tide 1x Hurkyl's Recall 1x Impulse 1x Lim-Dûl's Vault 1x Mana Drain 1x Mental Misstep 1x Mystical Tutor 1x Negate 1x Opt 1x Pact of Negation 1x Quicken 1x Silence 1x Spell Pierce 1x Swan Song 1x Swords to Plowshares 1x Vampiric Tutor	1x Demonic Tutor 1x Doomsday 1x Gitaxian Probe 1x Imperial Seal 1x Merchant Scroll 1x Ponder 1x Preordain 1x Timetwister 1x Toxic Deluge 1x Windfall 1x Yawgmoth's Will
Land (29)		Artifact (21)
1x Ancient Tomb 1x Arid Mesa 1x Bloodstained Mire 1x City of Brass 1x Command Tower 1x Flooded Strand 1x Gemstone Caverns 1x Godless Shrine 1x Hallowed Fountain 8x Island 1x Mana Confluence 1x Marsh Flats 1x Misty Rainforest 1x Polluted Delta 1x Scalding Tarn 1x Scrubland 1x Swamp 1x Tundra 1x Underground Sea 1x Verdant Catacombs 1x Watery Grave 1x Windswept Heath		1x Aetherflux Reservoir 1x Azorius Signet 1x Chrome Mox 1x Dimir Signet 1x Fellwar Stone 1x Grim Monolith 1x Helm of Awakening 1x Isochron Scepter 1x Lion's Eye Diamond 1x Lotus Petal 1x Mana Crypt 1x Mana Vault 1x Mox Diamond 1x Mox Opal 1x Nihil Spellbomb 1x Orzhov Signet 1x Scroll Rack 1x Sensei's Divining Top 1x Sol Ring 1x Talisman of Dominance 1x Talisman of Progress
Enchantment (3)		
1x Grasp of Fate 1x Mystic Remora 1x Necropotence		
Creature (4)		
1x Jace, Vryn's Prodigy 1x Laboratory Maniac 1x Notion Thief 1x Shimmer Myr		

4.53 Shuffle Hulk

Deck Link: <https://tappedout.net/mtg-decks/shuffle-hulk/>

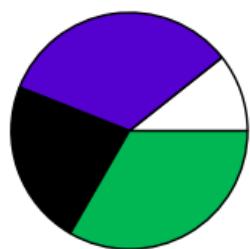
Discord Url: <https://discord.gg/n8xVUxu>

Author: sickrobot (<https://tappedout.net/users/sickrobot>)

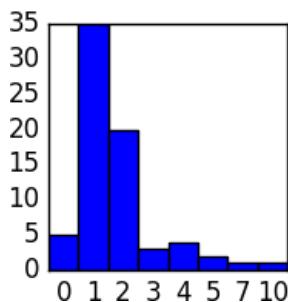
Commander(s): Thrasios, Triton Hero, Tymna the Weaver

Color: WUBG (W: 8 10.7% U: 25 33.3% B: 17 22.7% G: 25 33.3%)

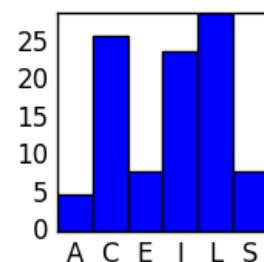
CMC: 1.79



(a) Mana Pie



(b) CMC Histogram



(c) Card Type Histogram

Figure 76: Shuffle Hulk

Decklist: Shuffle Hulk, Cockatrice Hash: k19hgv63

Commander (2)	Instant (24)	Sorcery (8)
1x Thrasios, Triton Hero	1x Abrupt Decay	1x Demonic Tutor
1x Tymna the Weaver	1x Brainstorm	1x Diabolic Intent
	1x Chain of Vapor	1x Gitaxian Probe
	1x Dispel	1x Imperial Seal
Land (29)	1x Eladamri's Call	1x Merchant Scroll
1x Bayou	1x Enlightened Tutor	1x Natural Order
1x Bloodstained Mire	1x Entomb	1x Ponder
1x Botanical Sanctum	1x Flash	1x Preordain
1x Breeding Pool	1x Flusterstorm	
1x City of Brass	1x Force of Will	Artifact (5)
1x Command Tower	1x Lim-Dûl's Vault	1x Altar of Dementia
1x Exotic Orchard	1x Memory's Journey	1x Chrome Mox
1x Flooded Strand	1x Mental Misstep	1x Mana Crypt
1x Forbidden Orchard	1x Misdirection	1x Mox Diamond
1x Llanowar Wastes	1x Mystical Tutor	1x Sol Ring
1x Mana Confluence	1x Nature's Claim	
1x Marsh Flats	1x Noxious Revival	Creature (24)
1x Misty Rainforest	1x Pact of Negation	1x Academy Rector
1x Morphic Pool	1x Pongify	1x Apprentice Necromancer
1x Overgrown Tomb	1x Silence	1x Arbor Elf
1x Polluted Delta	1x Summoner's Pact	1x Avacyn's Pilgrim
1x Savannah	1x Swan Song	1x Birds of Paradise
1x Scalding Tarn	1x Vampiric Tutor	1x Blood Artist
1x Scrubland	1x Worldly Tutor	1x Bloom Tender
1x Tarnished Citadel		1x Body Snatcher
1x Tropical Island	Enchantment (8)	1x Carrion Feeder
1x Tundra	1x Carpet of Flowers	1x Cephalid Illusionist
1x Underground River	1x Freed from the Real	1x Dark Confidant
1x Underground Sea	1x Mystic Remora	1x Deathrite Shaman
1x Verdant Catacombs	1x Necromancy	1x Elves of Deep Shadow
1x Watery Grave	1x Pattern of Rebirth	1x Elvish Mystic
1x Windswept Heath	1x Survival of the Fittest	1x Fyndhorn Elves
1x Wooded Foothills	1x Sylvan Library	1x Gilded Drake
1x Yavimaya Coast	1x Wild Growth	1x Kozilek, Butcher of Truth
		1x Leonin Relic-Warder
		1x Llanowar Elves
		1x Narcomoeba
		1x Noble Hierarch
		1x Nomads en-Kor
		1x Protean Hulk
		1x Viscera Seer

4.54 Sidisi Ad Naus Fishbowl

Deck Link: <https://tappedout.net/mtg-decks/sidisis-reign-of-filth/>

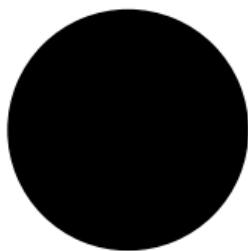
Discord Url: <https://discord.gg/abTZ8rT>

Author: Nakhla (<https://tappedout.net/users/Nakhla>)

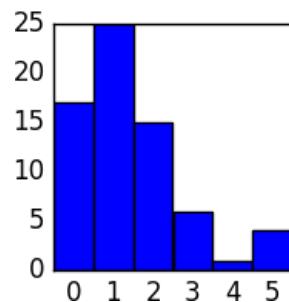
Commander(s): Sidisi, Undead Vizier

Color: B (B: 31 100.0%)

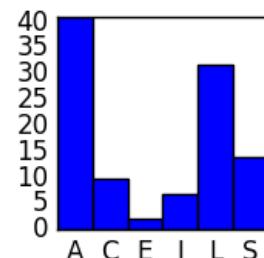
CMC: 1.43



(a) Mana Pie



(b) CMC Histogram



(c) Card Type Histogram

Figure 77: Sidisi Ad Naus Fishbowl

Decklist: Sidisi Ad Naus Fishbowl, Cockatrice Hash: de473cts

Commander (1)	Sorcery (14)	Artifact (35)
1x Sidisi, Undead Vizier	1x Bubbling Muck 1x Cabal Therapy 1x Deathmark 1x Demonic Tutor 1x Diabolic Intent 1x Duress 1x Exsanguinate 1x Grim Tutor 1x Imperial Seal 1x Inquisition of Kozilek 1x Praetor's Grasp 1x Reanimate 1x Thoughtseize 1x Yawgmoth's Will	1x Aetherflux Reservoir 1x Astral Cornucopia 1x Basalt Monolith 1x Chromatic Sphere 1x Chromatic Star 1x Chrome Mox 1x Codex Shredder 1x Conjurer's Bauble 1x Defense Grid 1x Everflowing Chalice 1x Expedition Map 1x Fellwar Stone 1x Fractured Powerstone 1x Grim Monolith 1x Helm of Awakening 1x Jet Medallion 1x Jeweled Amulet 1x Lion's Eye Diamond 1x Lotus Petal 1x Mana Crypt 1x Mana Vault 1x Mind Stone 1x Mishra's Bauble 1x Mox Diamond 1x Mox Opal 1x Paradox Engine 1x Prismatic Lens 1x Rings of Brightearth 1x Sensei's Divining Top 1x Sol Ring 1x Springleaf Drum 1x Thought Vessel 1x Urza's Bauble 1x Voltaic Key 1x Wayfarer's Bauble
Land (32)		
1x Ancient Tomb 1x Boseiju, Who Shelters All 1x Cavern of Souls 1x City of Traitors 1x Crystal Vein 1x Ebon Stronghold 1x Gemstone Caverns 1x Lake of the Dead 1x Peat Bog 1x Phyrexian Tower 21x Swamp 1x Urborg, Tomb of Yawgmoth		
Instant (7)		
1x Ad Nauseam 1x Cabal Ritual 1x Culling the Weak 1x Dark Ritual 1x Rain of Filth 1x Slaughter Pact 1x Vampiric Tutor		
Enchantment (2)		
1x Animate Dead 1x Dance of the Dead		
Creature (9)		
1x Blood Pet 1x Hope of Ghirapur 1x Memnite 1x Ornithopter 1x Overeager Apprentice 1x Phyrexian Walker 1x Shield Sphere 1x Skirge Familiar 1x Walking Ballista		

4.55 T&T Hulkball

Deck Link: http://tappedout.net/mtg-decks/tymna-tana_the-burlap-sack_threaten-copy-1/

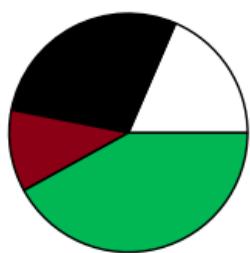
Discord Url: <https://discord.gg/7nUTaXa>

Author: tw0handt0uch (<https://tappedout.net/users/tw0handt0uch>)

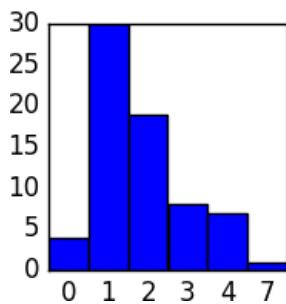
Commander(s): Tana, the Bloodsower, Tymna the Weaver

Color: WBRG (W: 15 18.5% B: 23 28.4% R: 9 11.1% G: 34 42.0%)

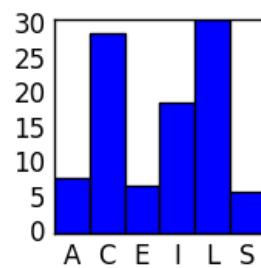
CMC: 1.84



(a) Mana Pie



(b) CMC Histogram



(c) Card Type Histogram

Figure 78: T&T Hulkball

Decklist: T&T Hulkball, Cockatrice Hash: nk4ii190

Commander (2)	Instant (19)	Artifact (8)
1x Tana, the Bloodsower	1x Abrade	1x Altar of Dementia
1x Tymna the Weaver	1x Abrupt Decay	1x Birthing Pod
	1x Autumn's Veil	1x Chrome Mox
	1x Chord of Calling	1x Lotus Petal
Land (31)	1x Dark Ritual	1x Mana Crypt
1x Arid Mesa	1x Eladamri's Call	1x Mox Diamond
1x Badlands	1x Enlightened Tutor	1x Sol Ring
1x Bayou	1x Entomb	1x Spawning Pit
1x Bloodstained Mire	1x Fire Covenant	
1x Brushland	1x Guttural Response	Creature (27)
1x City of Brass	1x Natural State	1x Academy Rector
1x Command Tower	1x Nature's Claim	1x Anafenza, Kin-Tree Spirit
1x Exotic Orchard	1x Path to Exile	1x Arbor Elf
1x Flooded Strand	1x Pyroblast	1x Avacyn's Pilgrim
1x Forbidden Orchard	1x Red Elemental Blast	1x Aven Mindcensor
1x Forest	1x Silence	1x Birds of Paradise
1x Gaea's Cradle	1x Swords to Plowshares	1x Blood Artist
1x Gemstone Caverns	1x Vampiric Tutor	1x Bloodthrone Vampire
1x Gemstone Mine	1x Worldly Tutor	1x Body Snatcher
1x Godless Shrine		1x Boreal Druid
1x Mana Confluence	Enchantment (7)	1x Carrion Feeder
1x Marsh Flats	1x Animate Dead	1x Caustic Caterpillar
1x Misty Rainforest	1x Carpet of Flowers	1x Dark Confidant
1x Overgrown Tomb	1x Goblin Bombardment	1x Deathrite Shaman
1x Plains	1x Necromancy	1x Dross Hopper
1x Plateau	1x Pattern of Rebirth	1x Elves of Deep Shadow
1x Polluted Delta	1x Survival of the Fittest	1x Elvish Mystic
1x Savannah	1x Sylvan Library	1x Elvish Spirit Guide
1x Scrubland		1x Fyndhorn Elves
1x Swamp	Sorcery (6)	1x Golgari Thug
1x Taiga	1x Demonic Tutor	1x Grand Abolisher
1x Tarnished Citadel	1x Diabolic Intent	1x Hushwing Gryff
1x Temple Garden	1x Eldritch Evolution	1x Leonin Relic-Warder
1x Verdant Catacombs	1x Imperial Seal	1x Llanowar Elves
1x Windswept Heath	1x Natural Order	1x Murderous Redcap
1x Wooded Foothills	1x Sylvan Tutor	1x Protean Hulk
		1x Viscera Seer

4.56 Tazri Hulk

Deck Link: <http://tappedout.net/mtg-decks/tazri-hulk-druid/>

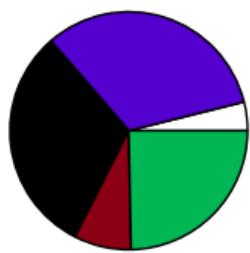
Discord Url: <https://discord.gg/B8XPcEz>

Author: biopouvoir (<https://tappedout.net/users/biopouvoir>)

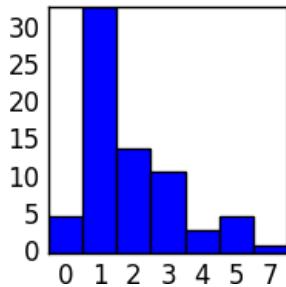
Commander(s): General Tazri

Color: WUBRG (W: 3 3.9% U: 25 32.5% B: 24 31.2% R: 6 7.8% G: 19 24.7%)

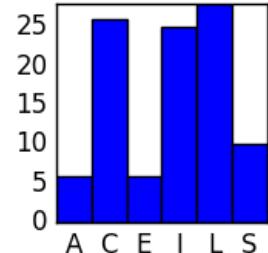
CMC: 1.92



(a) Mana Pie



(b) CMC Histogram



(c) Card Type Histogram

Figure 79: Tazri Hulk

Decklist: Tazri Hulk, Cockatrice Hash: eaikq7om

Commander (1)	Instant (25)	Sorcery (10)
1x General Tazri	1x Abrupt Decay 1x Ad Nauseam 1x Brainstorm 1x Chain of Vapor 1x Dark Ritual 1x Demonic Consultation 1x Enlightened Tutor 1x Entomb 1x Fire Covenant 1x Flash 1x Flash of Insight 1x Force of Will 1x Lim-Dûl's Vault 1x Memory's Journey 1x Mental Misstep 1x Mystical Tutor 1x Nature's Claim 1x Noxious Revival 1x Pact of Negation 1x Spell Pierce 1x Stifle 1x Swan Song 1x Swords to Plowshares 1x Tainted Pact 1x Vampiric Tutor	1x Cabal Therapy 1x Demonic Tutor 1x Dread Return 1x Gitaxian Probe 1x Green Sun's Zenith 1x Imperial Seal 1x Ponder 1x Timetwister 1x Windfall 1x Yawgmoth's Will
Land (28)		Artifact (6)
1x Arid Mesa 1x Bayou 1x Bloodstained Mire 1x Breeding Pool 1x City of Brass 1x Command Tower 1x Dryad Arbor 1x Exotic Orchard 1x Flooded Strand 1x Forbidden Orchard 1x Gemstone Caverns 1x Gemstone Mine 1x Mana Confluence 1x Marsh Flats 1x Misty Rainforest 1x Overgrown Tomb 1x Polluted Delta 1x Savannah 1x Scalding Tarn 1x Scrubland 1x Tarnished Citadel 1x Tropical Island 1x Tundra 1x Underground Sea 1x Verdant Catacombs 1x Watery Grave 1x Windswept Heath 1x Wooded Foothills	1x Chrome Mox 1x Lotus Petal 1x Mana Crypt 1x Mana Vault 1x Mox Diamond 1x Sol Ring	
	Enchantment (6)	Creature (24)
	1x Carpet of Flowers 1x Food Chain 1x Mystic Remora 1x Necromancy 1x Necropotence 1x Sylvan Library	1x Avacyn's Pilgrim 1x Birds of Paradise 1x Boreal Druid 1x Dark Confidant 1x Deathrite Shaman 1x Elves of Deep Shadow 1x Elvish Mystic 1x Eternal Scourge 1x Fatestitcher 1x Fyndhorn Elves 1x Gilded Drake 1x Goblin Dark-Dwellers 1x Hagra Diabolist 1x Halimar Excavator 1x Hellraiser Goblin 1x Hermit Druid 1x Kalastria Healer 1x Laboratory Maniac 1x Llanowar Elves 1x Misthollow Griffin 1x Narcomoeba 1x Noble Hierarch 1x Protean Hulk 1x Squee, the Immortal

4.57 Teferi Chain Veil

Deck Link: <https://tappedout.net/mtg-decks/chain-veil-teferi/>

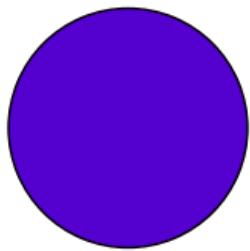
Discord Url: <https://discord.gg/3Y6CDyf>

Author: LabManiac_Sigi (https://tappedout.net/users/LabManiac_Sigi)

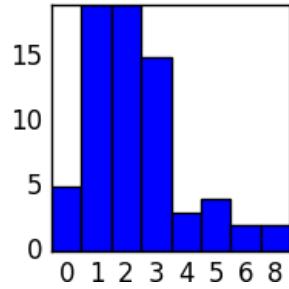
Commander(s): Teferi, Temporal Archmage

Color: U (U: 63 100.0%)

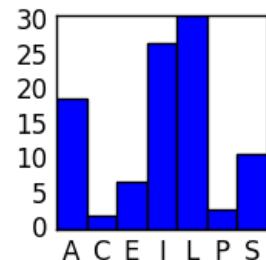
CMC: 2.35



(a) Mana Pie



(b) CMC Histogram



(c) Card Type Histogram

Figure 80: Teferi Chain Veil

Decklist: Teferi Chain Veil, Cockatrice Hash: 4ii396hu

Commander (1)	Instant (27)	Artifact (19)
1x Teferi, Temporal Archmage	1x Brainstorm 1x Chain of Vapor 1x Counterspell 1x Cyclonic Rift 1x Delay 1x Dig Through Time 1x Dispel 1x Fact or Fiction 1x Flusterstorm 1x Force of Will 1x High Tide 1x Impulse 1x Into the Roil 1x Intuition 1x Mana Drain 1x Mental Misstep 1x Muddle the Mixture 1x Mystical Tutor 1x Negate 1x Pact of Negation 1x Pull from Tomorrow 1x Pulse of the Grid 1x Spell Pierce 1x Stroke of Genius 1x Swan Song 1x Thirst for Knowledge 1x Whir of Invention	1x Basalt Monolith 1x Chrome Mox 1x Cursed Totem 1x Fellwar Stone 1x Gilded Lotus 1x Grafdigger's Cage 1x Grim Monolith 1x Mana Crypt 1x Mana Vault 1x Memory Jar 1x Mind Stone 1x Mox Diamond 1x Mox Opal 1x Rings of Brightearth 1x Sensei's Divining Top 1x Sol Ring 1x The Chain Veil 1x Thran Dynamo 1x Voltaic Key
Land (31)		
1x Academy Ruins 1x Ancient Tomb 1x Buried Ruin 1x Flooded Strand 1x Inventors' Fair 22x Island 1x Misty Rainforest 1x Polluted Delta 1x Scalding Tarn 1x The Tabernacle at Pendrell Vale		
Enchantment (7)		
1x Back to Basics 1x Copy Artifact 1x Mystic Remora 1x Power Artifact 1x Rhystic Study 1x Stasis 1x Verity Circle		
Sorcery (11)		
1x Fabricate 1x Gitaxian Probe 1x Merchant Scroll 1x Ponder 1x Preordain 1x Reshape 1x Sleight of Hand 1x Time Spiral 1x Timetwister 1x Transmute Artifact 1x Windfall		
Planeswalker (2)		
1x Tezzeret the Seeker 1x Ugin, the Spirit Dragon		
Creature (2)		
1x Spellseeker 1x Trinket Mage		

4.58 Varolz Hulk

Deck Link: <https://tappedout.net/mtg-decks/varolz-hulk/?cat=type&sort=>

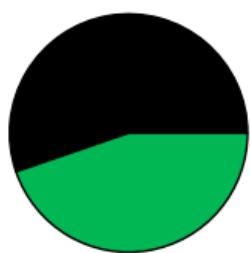
Discord Url: <https://discord.gg/NA4eTr>

Author: sickrobot (<https://tappedout.net/users/sickrobot>)

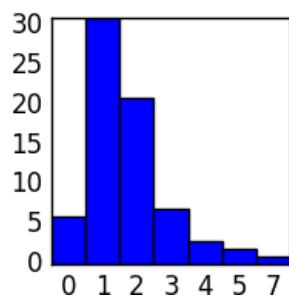
Commander(s): Varolz, the Scar-Striped

Color: BG (B: 42 55.3% G: 34 44.7%)

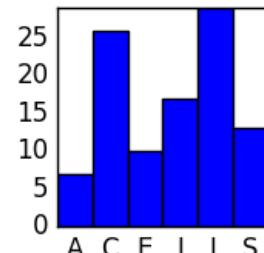
CMC: 1.73



(a) Mana Pie



(b) CMC Histogram



(c) Card Type Histogram

Figure 81: Varolz Hulk

Decklist: Varolz Hulk, Cockatrice Hash: ulagic76

Commander (1)	Instant (17)	Artifact (6)
1x Varolz, the Scar-Striped	1x Abrupt Decay 1x Ad Nauseam 1x Assassin's Trophy 1x Autumn's Veil 1x Cabal Ritual 1x Crop Rotation 1x Culling the Weak 1x Dark Ritual 1x Entomb 1x Mausoleum Secrets 1x Nature's Claim 1x Rain of Filth 1x Shallow Grave 1x Slaughter Pact 1x Summoner's Pact 1x Vampiric Tutor 1x Worldly Tutor	1x Chrome Mox 1x Lotus Petal 1x Mana Crypt 1x Mana Vault 1x Mox Diamond 1x Sol Ring
Land (29)		Creature (24)
1x Ancient Tomb 1x Bayou 1x Bloodstained Mire 1x Blooming Marsh 1x Cavern of Souls 1x City of Brass 1x Command Tower 1x Dryad Arbor 4x Forest 1x Gaea's Cradle 1x Gemstone Caverns 1x Llanowar Wastes 1x Mana Confluence 1x Marsh Flats 1x Misty Rainforest 1x Overgrown Tomb 1x Phyrexian Tower 1x Polluted Delta 4x Swamp 1x Twilight Mire 1x Verdant Catacombs 1x Windswept Heath 1x Wooded Foothills	1x Apprentice Necromancer 1x Arbor Elf 1x Birds of Paradise 1x Body Snatcher 1x Boreal Druid 1x Caustic Caterpillar 1x Dark Confidant 1x Deathrite Shaman 1x Disciple of the Vault 1x Elves of Deep Shadow 1x Elvish Mystic 1x Fauna Shaman 1x Fyndhorn Elves 1x Golgari Thug 1x Grim Flayer 1x Llanowar Elves 1x Melira, Sylvok Outcast 1x Mindblade Render 1x Priest of Titania 1x Protean Hulk 1x Riftsweeper 1x Sylvan Safekeeper 1x Viscera Seer 1x Wingrattle Scarecrow	
Enchantment (10)	Sorcery (13)	
1x Animate Dead 1x Carpet of Flowers 1x Dance of the Dead 1x Necromancy 1x Necropotence 1x Pattern of Rebirth 1x Survival of the Fittest 1x Sylvan Library 1x Utopia Sprawl 1x Wild Growth	1x Buried Alive 1x Cabal Therapy 1x Collective Brutality 1x Demonic Tutor 1x Diabolic Intent 1x Final Parting 1x Green Sun's Zenith 1x Grim Tutor 1x Imperial Seal 1x Life // Death 1x Natural Order 1x Reanimate 1x Thoughtseize	

4.59 Zuran Consultation

Deck Link: <http://tappedout.net/mtg-decks/zuran-consultation/>

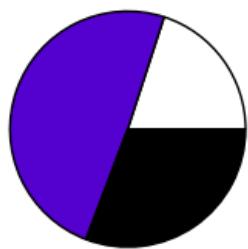
Discord Url: <https://discord.gg/UDgq2QF>

Author: Nakhla (<https://tappedout.net/users/Nakhla>)

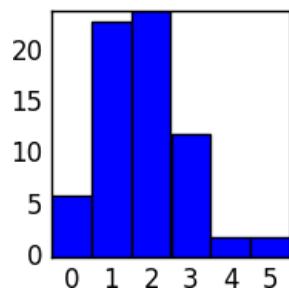
Commander(s): Zur the Enchanter

Color: WUB (W: 13 20.0% U: 32 49.2% B: 20 30.8%)

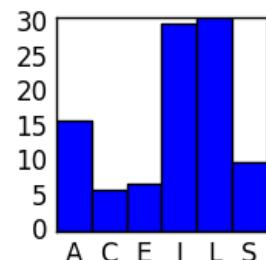
CMC: 1.81



(a) Mana Pie



(b) CMC Histogram



(c) Card Type Histogram

Figure 82: Zuran Consultation

Decklist: Zuran Consultation, Cockatrice Hash: jle0i2es

Commander (1)	Instant (30)	Enchantment (7)
1x Zur the Enchanter	1x Ad Nauseam 1x Angel's Grace 1x Brainstorm 1x Cabal Ritual 1x Chain of Vapor 1x Counterspell 1x Cyclonic Rift 1x Dark Ritual 1x Delay 1x Demonic Consultation 1x Dispel 1x Dramatic Reversal 1x Enlightened Tutor 1x Flusterstorm 1x Force of Will 1x Frantic Search 1x Impulse 1x Lim-Dûl's Vault 1x Mana Drain 1x Mental Misstep 1x Mystical Tutor 1x Negate 1x Pact of Negation 1x Silence 1x Spell Pierce 1x Swan Song 1x Swords to Plowshares 1x Tainted Pact 1x Vampiric Tutor 1x Winds of Rebuke	1x Aura of Silence 1x Copy Artifact 1x Grasp of Fate 1x Mystic Remora 1x Necropotence 1x Phyrexian Unlife 1x Rest in Peace
Land (31)		Sorcery (10)
1x Adarkar Wastes 1x Ancient Tomb 1x Arid Mesa 1x Bloodstained Mire 1x City of Brass 1x Command Tower 1x Exotic Orchard 1x Flooded Strand 1x Forbidden Orchard 1x Gemstone Caverns 1x Godless Shrine 1x Hallowed Fountain 1x Island 1x Mana Confluence 1x Marsh Flats 1x Misty Rainforest 1x Morphic Pool 1x Polluted Delta 1x Scalding Tarn 1x Scrubland 1x Sea of Clouds 1x Snow-Covered Island 1x Snow-Covered Swamp 1x Tarnished Citadel 1x The Tabernacle at Pendrell Vale 1x Tundra 1x Underground River 1x Underground Sea 1x Verdant Catacombs 1x Watery Grave 1x Windswept Heath	1x Demonic Tutor 1x Gitaxian Probe 1x Imperial Seal 1x Ponder 1x Praetor's Grasp 1x Preordain 1x Timetwister 1x Toxic Deluge 1x Windfall 1x Yawgmoth's Will	
		Artifact (16)
		1x Azorius Signet 1x Chrome Mox 1x Cursed Totem 1x Dimir Signet 1x Fellwar Stone 1x Grim Monolith 1x Isochron Scepter 1x Lotus Petal 1x Mana Crypt 1x Mana Vault 1x Mox Diamond 1x Mox Opal 1x Sensei's Divining Top 1x Sol Ring 1x Talisman of Dominance 1x Talisman of Progress
		Creature (5)
		1x Aven Mindcensor 1x Containment Priest 1x Dark Confidant 1x Laboratory Maniac 1x Notion Thief

Appendix A Tables

A.1 Tables for Section 2.1 Cards By Color Identity

Table 5: W sorted by count

Card	Decks	Type	Mana Cost
Enlightened Tutor	28	Instant	W
Silence	21	Instant	W
Swords to Plowshares	18	Instant	W
Aven Mindcensor	13	Creature	2W
Angel's Grace	11	Instant	W
Grand Abolisher	9	Creature	WW
Auriok Salvagers	8	Creature	3W
Leonin Relic-Warder	6	Creature	WW
Linvala, Keeper of Silence	5	Creature	2WW
Nomads en-Kor	5	Creature	W
Rest in Peace	4	Enchantment	1W
Eidolon of Rhetoric	4	Enchantment	Creature
Stony Silence	4	Enchantment	1W
Angel of Glory's Rise	4	Creature	5WW
Ethersworn Canonist	4	Artifact	Creature
Alms Collector	3	Creature	3W
Smothering Tithe	3	Enchantment	3W
Elesh Norn, Grand Cenobite	3	Creature	5WW
Aura of Silence	3	Enchantment	1WW
Children of Korlis	3	Creature	W
Grasp of Fate	3	Enchantment	1WW
Karmic Guide	3	Creature	3WW
Serra Ascendant	3	Creature	W
Thalia, Guardian of Thraben	3	Creature	1W
Warrior en-Kor	2	Creature	WW
Kataki, War's Wage	2	Creature	1W
Academy Rector	2	Creature	3W
Village Bell-Ringer	2	Creature	2W
Path to Exile	2	Instant	W
Shaman en-Kor	2	Creature	1W
Felidar Guardian	2	Creature	3W
Hushwing Gryff	2	Creature	2W
Rule of Law	2	Enchantment	2W
Phyrexian Unlife	1	Enchantment	2W
Anafenza, Kin-Tree Spirit	1	Creature	WW
Mother of Runes	1	Creature	W
Sun Titan	1	Creature	4WW
Pull from Eternity	1	Instant	W
Disenchant	1	Instant	1W
Ravages of War	1	Sorcery	3W
Weathered Wayfarer	1	Creature	W

Table 5: W sorted by count

Card	Decks	Type	Mana Cost
Blind Obedience	1	Enchantment	1W
Humility	1	Enchantment	2WW
Mana Tithe	1	Instant	W
Fragmentize	1	Sorcery	W
Suppression Field	1	Enchantment	1W
Spirit of the Labyrinth	1	Enchantment Creature	1W
Luminarch Ascension	1	Enchantment	1W
Hokori, Dust Drinker	1	Creature	2WW
Urza's Ruinous Blast	1	Sorcery	4W
Fiend Hunter	1	Creature	1WW
Armageddon	1	Sorcery	3W
Containment Priest	1	Creature	1W

Table 6: B sorted by count

Card	Decks	Type	Mana Cost
Demonic Tutor	47	Sorcery	1B
Vampiric Tutor	47	Instant	B
Imperial Seal	47	Sorcery	B
Dark Confidant	36	Creature	1B
Dark Ritual	33	Instant	B
Ad Nauseam	31	Instant	3BB
Yawgmoth's Will	24	Sorcery	2B
Toxic Deluge	24	Sorcery	2B
Necropotence	23	Enchantment	BBB
Diabolic Intent	22	Sorcery	1B
Cabal Ritual	22	Instant	1B
Entomb	21	Instant	B
Tainted Pact	17	Instant	1B
Necromancy	17	Enchantment	2B
Animate Dead	17	Enchantment	1B
Reanimate	16	Sorcery	B
Praetor's Grasp	11	Sorcery	1BB
Dance of the Dead	11	Enchantment	1B
Demonic Consultation	11	Instant	B
Cabal Therapy	10	Sorcery	B
Razaketh, the Foulblooded	9	Creature	5BBB
Grim Tutor	8	Sorcery	1BB
Thoughtseize	8	Sorcery	B
Culling the Weak	8	Instant	B
Buried Alive	7	Sorcery	2B
Rain of Filth	7	Instant	B
Dark Petition	7	Sorcery	3BB
Doomsday	6	Sorcery	BBB
Plunge into Darkness	6	Instant	1B

Table 6: B sorted by count

Card	Decks	Type	Mana Cost
Viscera Seer	6	Creature	B
Dread Return	6	Sorcery	2BB
Apprentice Necromancer	5	Creature	1B
Blood Artist	5	Creature	1B
Night's Whisper	5	Sorcery	1B
Shallow Grave	5	Instant	1B
Mindblade Render	4	Creature	1B
Body Snatcher	4	Creature	2BB
Duress	4	Sorcery	B
Phyrexian Delver	3	Creature	3BB
Slaughter Pact	3	Instant	0
Blood Pet	3	Creature	B
Inquisition of Kozilek	3	Sorcery	B
Necrotic Ooze	3	Creature	2BB
Carrion Feeder	3	Creature	B
Nihil Spellbomb	3	Artifact	1
Massacre	3	Sorcery	2BB
Zulaport Cutthroat	3	Creature	1B
Postmortem Lunge	3	Sorcery	XB/P
Exhume	3	Sorcery	1B
Sickening Dreams	2	Sorcery	1B
Dross Hopper	2	Creature	1B
Skirge Familiar	2	Creature	4B
Leyline of the Void	2	Enchantment	2BB
Golgari Thug	2	Creature	1B
Chains of Mephistopheles	2	Enchantment	1B
Kalastria Healer	2	Creature	1B
Deathmark	2	Sorcery	B
Collective Brutality	2	Sorcery	1B
Waste Not	2	Enchantment	1B
Mikaeus, the Unhallowed	2	Creature	3BBB
Bloodthrone Vampire	2	Creature	1B
Bubbling Muck	2	Sorcery	B
Exsanguinate	2	Sorcery	XBB
Overeager Apprentice	2	Creature	2B
Hagra Diabolist	2	Creature	4B
Sidisi, Undead Vizier	2	Creature	3BB
Dimir Machinations	1	Sorcery	2B
Gray Merchant of Asphodel	1	Creature	3BB
Street Wraith	1	Creature	3BB
Mindslicer	1	Creature	2BB
Plaguecrafter	1	Creature	2B
Blighted Bat	1	Creature	2B
Leaden Myr	1	Artifact Creature	2
Victimize	1	Sorcery	2B

Table 6: B sorted by count

Card	Decks	Type	Mana Cost
Sacrifice	1	Instant	B
Contamination	1	Enchantment	2B
Songs of the Damned	1	Instant	B
Bloodghast	1	Creature	BB
Corpse Dance	1	Instant	2B
Mausoleum Secrets	1	Instant	1B
Reassembling Skeleton	1	Creature	1B
Oppression	1	Enchantment	1BB
Goryo's Vengeance	1	Instant	1B
Footsteps of the Goryo	1	Sorcery	2B
Disciple of the Vault	1	Creature	B
Mogis's Marauder	1	Creature	2B
Putrid Imp	1	Creature	B
Fleshbag Marauder	1	Creature	2B
Oblivion Crown	1	Enchantment	1B
Darkblast	1	Instant	B
Final Parting	1	Sorcery	3BB

Table 7: U sorted by count

Card	Decks	Type	Mana Cost
Mystical Tutor	43	Instant	U
Mystic Remora	42	Enchantment	U
Brainstorm	41	Instant	U
Mental Misstep	41	Instant	U/P
Swan Song	40	Instant	U
Pact of Negation	37	Instant	0
Force of Will	37	Instant	3UU
Ponder	37	Sorcery	U
Flusterstorm	36	Instant	U
Chain of Vapor	35	Instant	U
Mana Drain	34	Instant	UU
Dispel	33	Instant	U
Preordain	32	Sorcery	U
Delay	31	Instant	1U
Timetwister	30	Sorcery	2U
Gitaxian Probe	28	Sorcery	U/P
Cyclonic Rift	28	Instant	1U
Windfall	25	Sorcery	2U
Dramatic Reversal	23	Instant	1U
Negate	22	Instant	1U
Spell Pierce	22	Instant	U
Gilded Drake	21	Creature	1U
Counterspell	19	Instant	UU
Copy Artifact	18	Enchantment	1U

Table 7: U sorted by count

Card	Decks	Type	Mana Cost
Frantic Search	17	Instant	2U
Laboratory Maniac	17	Creature	2U
Intuition	16	Instant	2U
Impulse	15	Instant	1U
Merchant Scroll	14	Sorcery	1U
Rhythmic Study	12	Enchantment	2U
Jace, Vryn's Prodigy	11	Creature	1U
Winds of Rebuke	10	Instant	1U
Spellseeker	10	Creature	2U
Flash	9	Instant	1U
Baral, Chief of Compliance	9	Creature	1U
Narcomoeba	7	Creature	1U
High Tide	7	Instant	U
Sleight of Hand	7	Sorcery	U
Opt	6	Instant	U
Snapcaster Mage	6	Creature	1U
Dig Through Time	6	Instant	6UU
Into the Roil	6	Instant	1U
Fact or Fiction	6	Instant	3U
Pongify	6	Instant	U
Consecrated Sphinx	5	Creature	4UU
Gush	5	Instant	4U
Reality Shift	5	Instant	1U
Jin-Gitaxias, Core Augur	5	Creature	8UU
Mind's Desire	5	Sorcery	4UU
Cephalid Illusionist	5	Creature	1U
Memory's Journey	5	Instant	1U
Muddle the Mixture	5	Instant	UU
Transmute Artifact	5	Sorcery	UU
Mana Leak	4	Instant	1U
Whir of Invention	4	Instant	XUUU
Fatestitcher	4	Creature	3U
Chart a Course	4	Sorcery	1U
Pull from Tomorrow	4	Instant	XUU
Snap	4	Instant	1U
Misdirection	4	Instant	3UU
Phantasmal Image	4	Creature	1U
Back to Basics	3	Enchantment	2U
Hurkyl's Recall	3	Instant	1U
Careful Study	3	Sorcery	U
Stroke of Genius	3	Instant	X2U
Freed from the Real	3	Enchantment	2U
Rapid Hybridization	3	Instant	U
Cloud of Faeries	2	Creature	1U
Spellskite	2	Artifact Creature	2

Table 7: U sorted by count

Card	Decks	Type	Mana Cost
Training Grounds	2	Enchantment	U
Thirst for Knowledge	2	Instant	2U
Personal Tutor	2	Sorcery	U
Misthollow Griffin	2	Creature	2UU
Curiosity	2	Enchantment	U
Stifle	2	Instant	U
Halimar Excavator	2	Creature	1U
Time Spiral	2	Sorcery	4UU
Flash of Insight	2	Instant	X1U
Remand	2	Instant	1U
Rebuild	2	Instant	2U
Aether Spellbomb	2	Artifact	1
Deep Analysis	2	Sorcery	3U
Counterbalance	2	Enchantment	UU
Fabricate	2	Sorcery	2U
Treasure Cruise	2	Sorcery	7U
Siren Stormtamer	2	Creature	U
Enter the Infinite	2	Sorcery	8UUUU
Ancestral Vision	2	Sorcery	0
Submerge	2	Instant	4U
Stubborn Denial	2	Instant	U
Blue Sun's Zenith	2	Instant	XUUU
Obsessive Search	2	Instant	U
Power Artifact	2	Enchantment	UU
Nezahal, Primal Tide	1	Creature	5UU
Mausoleum Wanderer	1	Creature	U
Stasis	1	Enchantment	1U
Sleight of Mind	1	Instant	U
Kiri-Onna	1	Creature	4U
Mulldrifter	1	Creature	4U
Manifold Insights	1	Sorcery	2U
Palinchron	1	Creature	5UU
Thought Scour	1	Instant	U
Mind Bend	1	Instant	U
Etherium Sculptor	1	Artifact Creature	1U
Serum Visions	1	Sorcery	U
Unified Will	1	Instant	1U
Body Double	1	Creature	4U
Mission Briefing	1	Instant	UU
Recurring Insight	1	Sorcery	4UU
Tetsuko Umezawa, Fugitive	1	Creature	1U
Search for Azcanta	1	Enchantment	1U
Loyal Drake	1	Creature	2U
Nightveil Sprite	1	Creature	1U
Time Warp	1	Sorcery	3UU

Table 7: U sorted by count

Card	Decks	Type	Mana Cost
Reshape	1	Sorcery	XUU
Cephalid Inkshrouder	1	Creature	2U
Sky Diamond	1	Artifact	2
Capture of Jingzhou	1	Sorcery	3UU
Temporal Mastery	1	Sorcery	5UU
Deceiver Exarch	1	Creature	2U
Thing in the Ice	1	Creature	1U
Slithermuse	1	Creature	2UU
Pestermite	1	Creature	2U
Triton Shorestalker	1	Creature	U
Unwind	1	Instant	2U
Gudul Lurker	1	Creature	U
Part the Waterveil	1	Sorcery	4UU
Mystic Confluence	1	Instant	3UU
Quicken	1	Instant	U
Karn's Temporal Sundering	1	Sorcery	4UU
Arcum Dagsson	1	Creature	3U
Turnabout	1	Instant	2UU
Teferi, Temporal Archmage	1	Planeswalker	4UU
Trait Doctoring	1	Sorcery	U
Diminishing Returns	1	Sorcery	2UU
Slither Blade	1	Creature	U
Foresight	1	Sorcery	1U
Devastation Tide	1	Sorcery	3UU
Unsubstantiate	1	Instant	1U
Nexus of Fate	1	Instant	5UU
Manipulate Fate	1	Sorcery	1U
Hapless Researcher	1	Creature	U
Temporal Trespass	1	Sorcery	8UUU
Faerie Miscreant	1	Creature	U
Predict	1	Instant	1U
Spectral Shift	1	Instant	1U
Extract	1	Sorcery	U
Verity Circle	1	Enchantment	2U
Stormscape Familiar	1	Creature	1U
Silver Myr	1	Artifact Creature	2
Spellstutter Sprite	1	Creature	1U
Notorious Throng	1	Sorcery	3U
Looter il-Kor	1	Creature	1U
Daze	1	Instant	1U
Trinket Mage	1	Creature	2U
Wingcrafter	1	Creature	U
Temporal Manipulation	1	Sorcery	3UU
Alter Reality	1	Instant	1U
Kederekt Leviathan	1	Creature	6UU

Table 7: U sorted by count

Card	Decks	Type	Mana Cost
Show and Tell	1	Sorcery	2U
Sidisi's Faithful	1	Creature	U
Glamerdyne	1	Instant	1U
Peregrine Drake	1	Creature	4U
Anticipate	1	Instant	1U
Pulse of the Grid	1	Instant	1UU
Whim of Volrath	1	Instant	U
Tezzeret the Seeker	1	Planeswalker	3UU
Walk the Aeons	1	Sorcery	4UU
Prohibit	1	Instant	1U
Mist-Cloaked Herald	1	Creature	U
Phyrexian Metamorph	1	Artifact Creature	3U/P
Intruder Alarm	1	Enchantment	2U

Table 8: G sorted by count

Card	Decks	Type	Mana Cost
Carpet of Flowers	40	Enchantment	G
Birds of Paradise	37	Creature	G
Sylvan Library	37	Enchantment	1G
Nature's Claim	34	Instant	G
Noxious Revival	33	Instant	G/P
Arbor Elf	31	Creature	G
Fyndhorn Elves	30	Creature	G
Llanowar Elves	29	Creature	G
Elvish Mystic	27	Creature	G
Survival of the Fittest	18	Enchantment	1G
Worldly Tutor	18	Instant	G
Wild Growth	16	Enchantment	G
Eternal Witness	15	Creature	1GG
Priest of Titania	15	Creature	1G
Utopia Sprawl	14	Enchantment	G
Boreal Druid	13	Creature	G
Green Sun's Zenith	13	Sorcery	XG
Crop Rotation	12	Instant	G
Protean Hulk	12	Creature	5GG
Bloom Tender	12	Creature	1G
Regrowth	10	Sorcery	1G
Summoner's Pact	10	Instant	0
Elvish Spirit Guide	9	Creature	2G
Exploration	8	Enchantment	G
Caustic Caterpillar	8	Creature	G
Natural State	7	Instant	G
Eldritch Evolution	7	Sorcery	1GG
Sylvan Safekeeper	7	Creature	G

Table 8: G sorted by count

Card	Decks	Type	Mana Cost
Autumn's Veil	6	Instant	G
Wall of Roots	6	Creature	1G
Riftsweeper	6	Creature	1G
Hermit Druid	6	Creature	1G
Runic Armasaur	6	Creature	1GG
Beast Within	6	Instant	2G
Reclamation Sage	5	Creature	2G
Chord of Calling	5	Instant	XGGG
Quirion Ranger	5	Creature	G
Sylvan Tutor	5	Sorcery	G
Natural Order	5	Sorcery	2GG
Yisan, the Wanderer Bard	5	Creature	2G
Root Maze	5	Enchantment	G
Seedborn Muse	4	Creature	3GG
Birthing Pod	4	Artifact	3G/P
Food Chain	4	Enchantment	2G
Pattern of Rebirth	4	Enchantment	3G
Devoted Druid	3	Creature	1G
Temur Sabertooth	3	Creature	2GG
Scavenging Ooze	3	Creature	1G
Bane of Progress	3	Creature	4GG
Mirri's Guile	3	Enchantment	G
Wirewood Symbiote	3	Creature	G
Compost	3	Enchantment	1G
Druids' Repository	2	Enchantment	1GG
Benefactor's Draught	2	Instant	1G
Keen Sense	2	Enchantment	G
Rishkar, Peema Renegade	2	Creature	2G
Earthcraft	2	Enchantment	1G
Wood Elves	2	Creature	2G
Weird Harvest	2	Sorcery	XGG
Nature's Will	2	Enchantment	2GG
Concordant Crossroads	2	Enchantment	G
Woodland Bellower	2	Creature	4GG
Azusa, Lost but Seeking	2	Creature	2G
Somberwald Stag	2	Creature	3GG
Life from the Loam	2	Sorcery	1G
Summer Bloom	2	Sorcery	1G
Manglehorn	2	Creature	2G
Selvala, Heart of the Wilds	2	Creature	1GG
Glimpse of Nature	2	Sorcery	G
Seasons Past	2	Sorcery	4GG
Song of the Dryads	2	Enchantment	2G
Scryb Ranger	2	Creature	1G
Squirrel Nest	2	Enchantment	1GG

Table 8: G sorted by count

Card	Decks	Type	Mana Cost
Fauna Shaman	2	Creature	1G
Tooth and Nail	1	Sorcery	5GG
Prowling Serpopard	1	Creature	1GG
Great Oak Guardian	1	Creature	5G
Eladamri, Lord of Leaves	1	Creature	GG
Uncage the Menagerie	1	Sorcery	XGG
Ravenous Slime	1	Creature	2G
Regal Force	1	Creature	4GGG
Sylvan Ranger	1	Creature	1G
Kamahl, Fist of Krosa	1	Creature	4GG
Nature's Lore	1	Sorcery	1G
Wall of Blossoms	1	Creature	1G
Greater Good	1	Enchantment	2GG
Sylvan Scrying	1	Sorcery	1G
Noose Constrictor	1	Creature	1G
Voyaging Satyr	1	Creature	1G
Skullwinder	1	Creature	2G
Tendershoot Dryad	1	Creature	4G
Gaea's Blessing	1	Sorcery	1G
Land Grant	1	Sorcery	1G
Bow of Nylea	1	Enchantment Artifact	1GG
Karametra's Acolyte	1	Creature	3G
Beastcaller Savant	1	Creature	1G
Kraul Harpooner	1	Creature	1G
Berserk	1	Instant	G
Sheltering Ancient	1	Creature	1G
Scryb Sprites	1	Creature	G
Dosan the Falling Leaf	1	Creature	1GG
Melira, Sylvok Outcast	1	Creature	1G
Generous Patron	1	Creature	2G
Garruk, Primal Hunter	1	Planeswalker	2GGG
Primal Command	1	Sorcery	3GG
Channeler Initiate	1	Creature	1G
Joraga Treespeaker	1	Creature	G
Reclaim	1	Instant	G
Craterhoof Behemoth	1	Creature	5GGG
Ramunap Excavator	1	Creature	2G
Krosan Wayfarer	1	Creature	G
Duskwatch Recruiter	1	Creature	1G
Somberwald Sage	1	Creature	2G
Deglamer	1	Instant	1G
Ravaging Riftwurm	1	Creature	1GG
Nettle Sentinel	1	Creature	G
Burgeoning	1	Enchantment	G
Genesis Hydra	1	Creature	XGG

Table 8: G sorted by count

Card	Decks	Type	Mana Cost
Spire Tracer	1	Creature	G
Phytoburst	1	Sorcery	1G
City of Solitude	1	Enchantment	2G
Soul's Majesty	1	Sorcery	4G
Savage Summoning	1	Instant	G
Ancient Animus	1	Instant	1G
Xantid Swarm	1	Creature	G
Ulvenwald Tracker	1	Creature	G
Three Visits	1	Sorcery	1G
Life's Legacy	1	Sorcery	1G
Might of Old Krosa	1	Instant	G
Genesis Wave	1	Sorcery	XGGG
Heart Warden	1	Creature	1G
Heritage Druid	1	Creature	G
Fierce Empath	1	Creature	2G
Vizier of the Menagerie	1	Creature	3G
Bond Beetle	1	Creature	G
Birchlore Rangers	1	Creature	G
Gaea's Herald	1	Creature	1G
Sakura-Tribe Scout	1	Creature	G
Reap	1	Instant	1G
Beast Whisperer	1	Creature	2GG
Nantuko Tracer	1	Creature	1G
Invigorate	1	Instant	2G
Groundswell	1	Instant	G
Treetop Scout	1	Creature	G
Elvish Visionary	1	Creature	1G
Lignify	1	Enchantment	1G
Vines of Vastwood	1	Instant	G
Momentous Fall	1	Instant	2GG
Golgari Grave-Troll	1	Creature	4G
Rishkar's Expertise	1	Sorcery	4GG

Table 9: R sorted by count

Card	Decks	Type	Mana Cost
Pyroblast	18	Instant	R
Wheel of Fortune	17	Sorcery	2R
Gamble	15	Sorcery	R
Red Elemental Blast	12	Instant	R
Rolling Earthquake	6	Sorcery	XR
Faithless Looting	4	Sorcery	R
Stranglehold	4	Enchantment	3R
Magus of the Moon	4	Creature	2R
Simian Spirit Guide	4	Creature	2R

Table 9: R sorted by count

Card	Decks	Type	Mana Cost
Abrade	4	Instant	1R
Squee, the Immortal	3	Creature	1RR
Worldgorger Dragon	3	Creature	3RRR
Kiki-Jiki, Mirror Breaker	3	Creature	2RRR
Imperial Recruiter	3	Creature	2R
Seething Song	3	Instant	2R
Blood Moon	3	Enchantment	2R
Rite of Flame	3	Sorcery	R
Winds of Change	2	Sorcery	R
Twinflame	2	Sorcery	1R
Goblin Bombardment	2	Enchantment	1R
Final Fortune	2	Instant	RR
Splinter Twin	2	Enchantment	2RR
Reckless Bushwhacker	1	Creature	2R
Pyroclasm	1	Sorcery	1R
Goblin Matron	1	Creature	2R
Dragon Mage	1	Creature	5RR
Mass Hysteria	1	Enchantment	R
Possibility Storm	1	Enchantment	3RR
Hellraiser Goblin	1	Creature	2R
Goblin Bushwhacker	1	Creature	R
By Force	1	Sorcery	XR
Purphoros, God of the Forge	1	Enchantment Creature	3R
Shattering Spree	1	Sorcery	R
Infernal Plunge	1	Sorcery	R
Desperate Ritual	1	Instant	1R
Lightning Bolt	1	Instant	R
Fork	1	Instant	RR
Pyretic Ritual	1	Instant	1R
Lightning Mauler	1	Creature	1R
Past in Flames	1	Sorcery	3R
Bonus Round	1	Sorcery	1RR
Wheel of Fate	1	Sorcery	0
Loyal Apprentice	1	Creature	1R
Need for Speed	1	Enchantment	R
Godo, Bandit Warlord	1	Creature	5R
Thunderclap	1	Instant	2R
Torch Courier	1	Creature	R
Last Chance	1	Sorcery	RR
Daretti, Scrap Savant	1	Planeswalker	3R
Ricochet Trap	1	Instant	3R
Goblin Sharpshooter	1	Creature	2R
Divergent Transformations	1	Instant	6R
Chaos Warp	1	Instant	2R
Heat Shimmer	1	Sorcery	2R

Table 9: R sorted by count

Card	Decks	Type	Mana Cost
Goblin Dark-Dwellers	1	Creature	3RR
Vandalblast	1	Sorcery	R
Rending Volley	1	Instant	R
Skirk Prospector	1	Creature	R
Treasonous Ogre	1	Creature	3R
Goblin Welder	1	Creature	R
Mogg Salvage	1	Instant	2R
Gorilla Shaman	1	Creature	R
Dualcaster Mage	1	Creature	1RR
Maximize Velocity	1	Sorcery	R
Magnetic Theft	1	Instant	R
Insolent Neonate	1	Creature	R
Anger	1	Creature	3R
Dire Fleet Daredevil	1	Creature	1R

Table 10: C sorted by count

Card	Decks	Type	Mana Cost
Mana Crypt	59	Artifact	0
Sol Ring	58	Artifact	1
Mox Diamond	57	Artifact	0
Chrome Mox	57	Artifact	0
Mana Vault	39	Artifact	1
Lotus Petal	35	Artifact	0
Fellwar Stone	30	Artifact	2
Sensei's Divining Top	30	Artifact	1
Grim Monolith	29	Artifact	2
Mox Opal	25	Artifact	0
Lion's Eye Diamond	22	Artifact	0
Isochron Scepter	19	Artifact	2
Paradox Engine	15	Artifact	5
Grafdigger's Cage	10	Artifact	1
Cursed Totem	8	Artifact	2
Null Rod	8	Artifact	2
Aetherflux Reservoir	8	Artifact	4
Walking Ballista	7	Artifact Creature	XX
Hope of Ghirapur	6	Artifact Creature	1
Helm of Awakening	6	Artifact	2
Prismatic Lens	5	Artifact	2
Memnite	5	Artifact Creature	0
Basalt Monolith	5	Artifact	3
Voltaic Key	5	Artifact	1
Skullclamp	5	Artifact	1
Trinisphere	5	Artifact	3
Mox Amber	5	Artifact	0

Table 10: C sorted by count

Card	Decks	Type	Mana Cost
Defense Grid	4	Artifact	2
Rings of Brighthearth	4	Artifact	3
Mind Stone	4	Artifact	2
Everflowing Chalice	4	Artifact	0
Thought Vessel	4	Artifact	2
Scroll Rack	4	Artifact	2
Phyrexian Revoker	4	Artifact Creature	2
Lightning Greaves	4	Artifact	2
Sphere of Resistance	4	Artifact	2
Eternal Scourge	3	Creature	3
Shield Sphere	3	Artifact Creature	0
Staff of Domination	3	Artifact	3
Ornithopter	3	Artifact Creature	0
Sapphire Medallion	3	Artifact	2
Phyrexian Walker	2	Artifact Creature	0
Candelabra of Tawnos	2	Artifact	1
Shuko	2	Artifact	1
Serum Powder	2	Artifact	3
Kozilek's Return	2	Instant	2R
Fractured Powerstone	2	Artifact	2
Ugin, the Spirit Dragon	2	Planeswalker	8
Expedition Map	2	Artifact	1
Metalworker	2	Artifact Creature	3
Shimmer Myr	2	Artifact Creature	3
Tangle Wire	2	Artifact	3
Altar of Dementia	2	Artifact	2
Memory Jar	2	Artifact	5
Myr Moonvessel	2	Artifact Creature	1
Umbral Mantle	2	Artifact	3
Springleaf Drum	2	Artifact	1
Lotus Bloom	2	Artifact	0
Codex Shredder	2	Artifact	1
Thorn of Amethyst	2	Artifact	2
Winter Orb	2	Artifact	2
Thousand-Year Elixir	2	Artifact	3
Jeweled Amulet	2	Artifact	0
Jet Medallion	2	Artifact	2
Kozilek, Butcher of Truth	2	Creature	10
Thran Dynamo	2	Artifact	4
The Chain Veil	1	Artifact	4
Myr Retriever	1	Artifact Creature	2
Wingrattle Scarecrow	1	Artifact Creature	3
Wayfarer's Bauble	1	Artifact	1
Argentum Armor	1	Artifact	6
Phyrexian Dreadnought	1	Artifact Creature	1

Table 10: C sorted by count

Card	Decks	Type	Mana Cost
Chromatic Sphere	1	Artifact	1
Krark-Clan Ironworks	1	Artifact	4
Welding Jar	1	Artifact	0
Pithing Needle	1	Artifact	1
Hedron Crawler	1	Artifact Creature	2
Panharmonicon	1	Artifact	4
Plague Myr	1	Artifact Creature	2
Junk Diver	1	Artifact Creature	3
Chalice of the Void	1	Artifact	XX
Honor-Worn Shaku	1	Artifact	3
Worn Powerstone	1	Artifact	3
Lupine Prototype	1	Artifact Creature	2
Ancestral Statue	1	Artifact Creature	4
Arcbound Ravager	1	Artifact Creature	2
Mishra's Bauble	1	Artifact	0
Urza's Bauble	1	Artifact	0
Guardian Idol	1	Artifact	2
Cloudstone Curio	1	Artifact	3
Silent Gravestone	1	Artifact	1
Thought-Knot Seer	1	Creature	3C
Phyrexian Soulgorger	1	Artifact Creature	3
Brass Squire	1	Artifact Creature	3
Hammer of Nazahn	1	Artifact	4
Phyrexian Devourer	1	Artifact Creature	6
Palladium Myr	1	Artifact Creature	3
Altar of the Brood	1	Artifact	1
Gilded Lotus	1	Artifact	5
Spine of Ish Sah	1	Artifact	7
Citanul Flute	1	Artifact	5
Chromatic Star	1	Artifact	1
Duplicant	1	Artifact Creature	6
Blisterpod	1	Creature	G
Hangarback Walker	1	Artifact Creature	XX
Conjurer's Bauble	1	Artifact	1
Manakin	1	Artifact Creature	2
Astral Cornucopia	1	Artifact	XXX
Spawning Pit	1	Artifact	2
Static Orb	1	Artifact	3
Smothering Abomination	1	Creature	2BB
Helm of the Host	1	Artifact	4
Scrap Trawler	1	Artifact Creature	3

Table 11: Gold sorted by count

Card	Decks	Type	Mana Cost
Deathrite Shaman	26	Creature	B/G
Lim-Dûl's Vault	25	Instant	UB
Abrupt Decay	24	Instant	BG
Notion Thief	18	Creature	2UB
Assassin's Trophy	14	Instant	BG
Fire Covenant	13	Instant	1BR
Tymna the Weaver	13	Creature	1WB
Thrasios, Triton Hero	9	Creature	GU
Eladamri's Call	8	Instant	GW
Life // Death	6	Sorcery	G // 1B
Dack Fayden	4	Planeswalker	1UR
Kess, Dissident Mage	3	Creature	1UBR
Manamorphose	3	Instant	1R/G
Zur the Enchanter	3	Creature	1WUB
Derevi, Empyrial Tactician	2	Creature	GWU
Squandered Resources	2	Enchantment	BG
Vial Smasher the Fierce	2	Creature	1BR
Breya, Etherium Shaper	2	Artifact Creature	WUBR
Yidris, Maelstrom Wielder	2	Creature	UBRG
Grim Flayer	2	Creature	BG
Vexing Shusher	2	Creature	R/GR/G
Guttural Response	2	Instant	R/G
Wear // Tear	2	Instant	1R // W
Mnemonic Betrayal	2	Sorcery	1UB
Edric, Spymaster of Trest	2	Creature	1GU
Wild Cantor	2	Creature	R/G
Izzet Charm	2	Instant	UR
Tana, the Bloodsower	2	Creature	2RG
Thousand-Year Storm	1	Enchantment	4UR
Saffi Eriksdotter	1	Creature	GW
Sire of Insanity	1	Creature	4BR
The Gitrog Monster	1	Creature	3BG
Captain Sisay	1	Creature	2GW
Bruse Tarl, Boorish Herder	1	Creature	2RW
Morselhoarder	1	Creature	4R/GR/G
Tishana, Voice of Thunder	1	Creature	5GU
Sliver Queen	1	Creature	WUBRG
Dimir Charm	1	Instant	UB
Rashmi, Eternities Crafter	1	Creature	2GU
Pernicious Deed	1	Enchantment	1BG
Safehold Elite	1	Creature	1G/W
Kiora's Follower	1	Creature	GU
Murderous Redcap	1	Creature	2B/RB/R
Varolz, the Scar-Striped	1	Creature	1BG
Animar, Soul of Elements	1	Creature	GUR

Table 11: Gold sorted by count

Card	Decks	Type	Mana Cost
Momir Vig, Simic Visionary	1	Creature	3GU
Shadow of Doubt	1	Instant	U/BU/B
Selvala, Explorer Returned	1	Creature	1GW
Meren of Clan Nel Toth	1	Creature	2BG
Anafenza, the Foremost	1	Creature	WBG
Altar of Bone	1	Sorcery	GW
Qasali Pridemage	1	Creature	GW
Sidisi, Brood Tyrant	1	Creature	1BGU
Prossh, Skyraider of Kher	1	Creature	3BRG
Ikra Shidiqi, the Usurper	1	Creature	3BG
The Mimeoplasm	1	Creature	2BGU
Jeleva, Nephilia's Scourge	1	Creature	1UBR

A.2 Tables for Section 2.2: Cards By Type

Table 12: Land sorted by count

Card	Decks	Color	Mana Cost	ACC	RCC
Misty Rainforest	54		0	N/A	N/A
Polluted Delta	53		0	N/A	N/A
Verdant Catacombs	51		0	N/A	N/A
Command Tower	50		0	N/A	N/A
Flooded Strand	50		0	N/A	N/A
Scalding Tarn	47		0	N/A	N/A
Windswept Heath	47		0	N/A	N/A
Bloodstained Mire	46		0	N/A	N/A
Mana Confluence	46		0	N/A	N/A
Wooded Foothills	46		0	N/A	N/A
City of Brass	46		0	N/A	N/A
Marsh Flats	46		0	N/A	N/A
Ancient Tomb	38		0	N/A	N/A
Underground Sea	36		0	N/A	N/A
Bayou	33		0	N/A	N/A
Watery Grave	32		0	N/A	N/A
Arid Mesa	31		0	N/A	N/A
Forbidden Orchard	31		0	N/A	N/A
Gemstone Caverns	30		0	N/A	N/A
Tropical Island	29		0	N/A	N/A
Overgrown Tomb	28		0	N/A	N/A
Breeding Pool	28		0	N/A	N/A
Exotic Orchard	28		0	N/A	N/A
Tarnished Citadel	27		0	N/A	N/A
Scrubland	25		0	N/A	N/A
Badlands	23		0	N/A	N/A
Forest	23	G	0	N/A	N/A

Table 12: Land sorted by count

Card	Decks	Color	Mana Cost	ACC	RCC
Island	22	U	0	N/A	N/A
Tundra	22		0	N/A	N/A
Gaea's Cradle	21	G	0	N/A	N/A
Savannah	20		0	N/A	N/A
Volcanic Island	19		0	N/A	N/A
Swamp	19	B	0	N/A	N/A
Cavern of Souls	18		0	N/A	N/A
Morphic Pool	18	UB	0	N/A	N/A
Steam Vents	14		0	N/A	N/A
Underground River	14	UB	0	N/A	N/A
Urborg, Tomb of Yawgmoth	14		0	N/A	N/A
Yavimaya Coast	14	UG	0	N/A	N/A
Snow-Covered Island	13	U	0	N/A	N/A
Taiga	12		0	N/A	N/A
Dryad Arbor	10	G	0	N/A	N/A
Snow-Covered Forest	10	G	0	N/A	N/A
Llanowar Wastes	9	BG	0	N/A	N/A
Hallowed Fountain	9		0	N/A	N/A
Snow-Covered Swamp	8	B	0	N/A	N/A
Gemstone Mine	8		0	N/A	N/A
Godless Shrine	7		0	N/A	N/A
Phyrexian Tower	7	B	0	N/A	N/A
Stomping Ground	7		0	N/A	N/A
Plateau	6		0	N/A	N/A
Temple Garden	6		0	N/A	N/A
Cephalid Coliseum	6	U	0	N/A	N/A
Strip Mine	6		0	N/A	N/A
Blood Crypt	6		0	N/A	N/A
City of Traitors	5		0	N/A	N/A
Boseiju, Who Shelters All	4		0	N/A	N/A
Blooming Marsh	4	BG	0	N/A	N/A
Sunken Ruins	4	UB	0	N/A	N/A
Lake of the Dead	4	B	0	N/A	N/A
Plains	4	W	0	N/A	N/A
Inventors' Fair	4		0	N/A	N/A
Horizon Canopy	4	WG	0	N/A	N/A
Twilight Mire	4	BG	0	N/A	N/A
Botanical Sanctum	3	UG	0	N/A	N/A
Buried Ruin	3		0	N/A	N/A
Crystal Vein	3		0	N/A	N/A
Nykthos, Shrine to Nyx	3		0	N/A	N/A
Flooded Grove	3	UG	0	N/A	N/A
Bazaar of Baghdad	3		0	N/A	N/A
Reflecting Pool	3		0	N/A	N/A
Vault of Whispers	2	B	0	N/A	N/A

Table 12: Land sorted by count

Card	Decks	Color	Mana Cost	ACC	RCC
Ebon Stronghold	2	B	0	N/A	N/A
Adarkar Wastes	2	WU	0	N/A	N/A
Mouth of Ronom	2		0	N/A	N/A
Barren Moor	2	B	0	N/A	N/A
Brushland	2	WG	0	N/A	N/A
The Tabernacle at Pendrell Vale	2		0	N/A	N/A
Academy Ruins	2	U	0	N/A	N/A
Sea of Clouds	2	WU	0	N/A	N/A
Bojuka Bog	2	B	0	N/A	N/A
Yavimaya Hollow	2	G	0	N/A	N/A
Hinterland Harbor	2	UG	0	N/A	N/A
Peat Bog	2	B	0	N/A	N/A
Snow-Covered Plains	2	W	0	N/A	N/A
Mistveil Plains	1	W	0	N/A	N/A
Sequestered Stash	1		0	N/A	N/A
Shivan Reef	1	UR	0	N/A	N/A
Rishadan Port	1		0	N/A	N/A
Ancient Ziggurat	1		0	N/A	N/A
Woodland Cemetery	1	BG	0	N/A	N/A
Darksteel Citadel	1		0	N/A	N/A
Wirewood Lodge	1	G	0	N/A	N/A
Homeward Path	1		0	N/A	N/A
High Market	1		0	N/A	N/A
Tranquil Thicket	1	G	0	N/A	N/A
Pendelhaven	1	G	0	N/A	N/A
Blasted Landscape	1		0	N/A	N/A
Petrified Field	1		0	N/A	N/A
Thran Quarry	1		0	N/A	N/A
Dwarven Ruins	1	R	0	N/A	N/A
Dakmor Salvage	1	B	0	N/A	N/A
Fetid Heath	1	WB	0	N/A	N/A
Sandstone Needle	1	R	0	N/A	N/A
Mountain	1	R	0	N/A	N/A
Command Beacon	1		0	N/A	N/A
Great Furnace	1	R	0	N/A	N/A
Okinia, Temple to the Grandfathers	1	G	0	N/A	N/A
Spire Garden	1	RG	0	N/A	N/A
Minamo, School at Water's Edge	1	U	0	N/A	N/A
Sacred Foundry	1		0	N/A	N/A
Blinkmoth Nexus	1		0	N/A	N/A
Flagstones of Trokair	1	W	0	N/A	N/A
Eiganjo Castle	1	W	0	N/A	N/A
Grove of the Burnwillows	1	RG	0	N/A	N/A
Graven Cairns	1	BR	0	N/A	N/A
Mishra's Workshop	1		0	N/A	N/A

Table 12: Land sorted by count

Card	Decks	Color	Mana Cost	ACC	RCC
Darkslick Shores	1	UB	0	N/A	N/A
Cabal Pit	1	B	0	N/A	N/A
Snow-Covered Mountain	1	R	0	N/A	N/A
Mishra's Factory	1		0	N/A	N/A
Inkmoth Nexus	1		0	N/A	N/A
Scavenger Grounds	1		0	N/A	N/A
Cascade Bluffs	1	UR	0	N/A	N/A
Luxury Suite	1	BR	0	N/A	N/A
Seat of the Synod	1	U	0	N/A	N/A
Wooded Bastion	1	WG	0	N/A	N/A

Table 13: Creature sorted by count

Card	Decks	Color	Mana Cost	ACC	RCC
Birds of Paradise	37	G	G	N/A	N/A
Dark Confidant	36	B	1B	N/A	N/A
Arbor Elf	31	G	G	N/A	N/A
Deathrite Shaman	31	BG	B/G	N/A	N/A
Fyndhorn Elves	30	G	G	N/A	N/A
Llanowar Elves	29	G	G	N/A	N/A
Elvish Mystic	27	G	G	N/A	N/A
Elves of Deep Shadow	24	BG	G	N/A	N/A
Notion Thief	22	UB	2UB	N/A	N/A
Gilded Drake	21	U	1U	N/A	N/A
Avacyn's Pilgrim	18	WG	G	N/A	N/A
Tymna the Weaver	18	WB	1WB	N/A	N/A
Laboratory Maniac	17	U	2U	N/A	N/A
Eternal Witness	15	G	1GG	N/A	N/A
Priest of Titania	15	G	1G	N/A	N/A
Noble Hierarch	15	WUG	G	N/A	N/A
Boreal Druid	13	G	G	N/A	N/A
Aven Mindcensor	13	W	2W	N/A	N/A
Thrasiros, Triton Hero	13	UG	GU	N/A	N/A
Protean Hulk	12	G	5GG	N/A	N/A
Bloom Tender	12	G	1G	N/A	N/A
Jace, Vryn's Prodigy	11	U	1U	N/A	N/A
Dryad Arbor	10	G	0	N/A	N/A
Spellseeker	10	U	2U	N/A	N/A
Baral, Chief of Compliance	9	U	1U	N/A	N/A
Razaketh, the Foulblooded	9	B	5BBB	N/A	N/A
Elvish Spirit Guide	9	G	2G	N/A	N/A
Grand Abolisher	9	W	WW	N/A	N/A
Caustic Caterpillar	8	G	G	N/A	N/A
Auriok Salvagers	8	W	3W	N/A	N/A
Narcomoeba	7	U	1U	N/A	N/A

Table 13: Creature sorted by count

Card	Decks	Color	Mana Cost	ACC	RCC
Sylvan Safekeeper	7	G	G	N/A	N/A
Walking Ballista	7		XX	N/A	N/A
Hope of Ghirapur	6		1	N/A	N/A
Riftsweeper	6	G	1G	N/A	N/A
Snapcaster Mage	6	U	1U	N/A	N/A
Leonin Relic-Warder	6	W	WW	N/A	N/A
Hermit Druid	6	G	1G	N/A	N/A
Viscera Seer	6	B	B	N/A	N/A
Runic Armasaur	6	G	1GG	N/A	N/A
Wall of Roots	6	G	1G	N/A	N/A
Yisan, the Wanderer Bard	5	G	2G	N/A	N/A
Apprentice Necromancer	5	B	1B	N/A	N/A
Blood Artist	5	B	1B	N/A	N/A
Consecrated Sphinx	5	U	4UU	N/A	N/A
Linvala, Keeper of Silence	5	W	2WW	N/A	N/A
Memnite	5		0	N/A	N/A
Reclamation Sage	5	G	2G	N/A	N/A
Quirion Ranger	5	G	G	N/A	N/A
Jin-Gitaxias, Core Augur	5	U	8UU	N/A	N/A
Cephalid Illusionist	5	U	1U	N/A	N/A
Nomads en-Kor	5	W	W	N/A	N/A
Body Snatcher	4	B	2BB	N/A	N/A
Ethersworn Canonist	4	W	1W	N/A	N/A
Vial Smasher the Fierce	4	BR	1BR	N/A	N/A
Mindblade Render	4	B	1B	N/A	N/A
Fatestitcher	4	U	3U	N/A	N/A
Seedborn Muse	4	G	3GG	N/A	N/A
Phyrexian Revoker	4		2	N/A	N/A
Eidolon of Rhetoric	4	W	2W	N/A	N/A
Magus of the Moon	4	R	2R	N/A	N/A
Phantasmal Image	4	U	1U	N/A	N/A
Angel of Glory's Rise	4	W	5WW	N/A	N/A
Simian Spirit Guide	4	R	2R	N/A	N/A
Eternal Scourge	3		3	N/A	N/A
Phyrexian Delver	3	B	3BB	N/A	N/A
Devoted Druid	3	G	1G	N/A	N/A
Elesh Norn, Grand Cenobite	3	W	5WW	N/A	N/A
Vexing Shusher	3	RG	R/GR/G	N/A	N/A
Bane of Progress	3	G	4GG	N/A	N/A
Carrion Feeder	3	B	B	N/A	N/A
Temur Sabertooth	3	G	2GG	N/A	N/A
Karmic Guide	3	W	3WW	N/A	N/A
Kess, Dissident Mage	3	UBR	1UBR	N/A	N/A
Wirewood Symbiote	3	G	G	N/A	N/A
Necrotic Ooze	3	B	2BB	N/A	N/A

Table 13: Creature sorted by count

Card	Decks	Color	Mana Cost	ACC	RCC
Squee, the Immortal	3	R	1RR	N/A	N/A
Blood Pet	3	B	B	N/A	N/A
Children of Korlis	3	W	W	N/A	N/A
Scavenging Ooze	3	G	1G	N/A	N/A
Thalia, Guardian of Thraben	3	W	1W	N/A	N/A
Alms Collector	3	W	3W	N/A	N/A
Kiki-Jiki, Mirror Breaker	3	R	2RRR	N/A	N/A
Imperial Recruiter	3	R	2R	N/A	N/A
Zur the Enchanter	3	WUB	1WUB	N/A	N/A
Shield Sphere	3		0	N/A	N/A
Orcish Lumberjack	3	RG	R	N/A	N/A
Tana, the Bloodsower	3	RG	2RG	N/A	N/A
Serra Ascendant	3	W	W	N/A	N/A
Worldgorger Dragon	3	R	3RRR	N/A	N/A
Ornithopter	3		0	N/A	N/A
Zulaport Cutthroat	3	B	1B	N/A	N/A
Cloud of Faeries	2	U	1U	N/A	N/A
Mikaeus, the Unhallowed	2	B	3BBB	N/A	N/A
Yidris, Maelstrom Wielder	2	UBRG	UBRG	N/A	N/A
Najeela, the Blade-Blossom	2	WUBRG	2R	N/A	N/A
Kataki, War's Wage	2	W	1W	N/A	N/A
Rishkar, Peema Renegade	2	G	2G	N/A	N/A
Academy Rector	2	W	3W	N/A	N/A
Hushwing Gryff	2	W	2W	N/A	N/A
Spellskite	2	U	2	N/A	N/A
Siren Stormtamer	2	U	U	N/A	N/A
Phyxian Walker	2		0	N/A	N/A
Halimar Excavator	2	U	1U	N/A	N/A
Dross Hopper	2	B	1B	N/A	N/A
Wood Elves	2	G	2G	N/A	N/A
Grim Flayer	2	BG	BG	N/A	N/A
Skirge Familiar	2	B	4B	N/A	N/A
Misthollow Griffin	2	U	2UU	N/A	N/A
Overeager Apprentice	2	B	2B	N/A	N/A
Village Bell-Ringer	2	W	2W	N/A	N/A
Woodland Bellower	2	G	4GG	N/A	N/A
Derevi, Empyrial Tactician	2	WUG	GWU	N/A	N/A
Azusa, Lost but Seeking	2	G	2G	N/A	N/A
Somberwald Stag	2	G	3GG	N/A	N/A
Golgari Thug	2	B	1B	N/A	N/A
Tasigur, the Golden Fang	2	UBG	5B	N/A	B
Scryb Ranger	2	G	1G	N/A	N/A
Myr Moonvessel	2		1	N/A	N/A
General Tazri	2	WUBRG	4W	N/A	N/A
Shaman en-Kor	2	W	1W	N/A	N/A

Table 13: Creature sorted by count

Card	Decks	Color	Mana Cost	ACC	RCC
Metalworker	2		3	N/A	N/A
Manglehorn	2	G	2G	N/A	N/A
Selvala, Heart of the Wilds	2	G	1GG	N/A	N/A
Edric, Spymaster of Trest	2	UG	1GU	N/A	N/A
Wild Cantor	2	RG	R/G	N/A	N/A
Anafenza, the Foremost	2	WBG	WBG	N/A	N/A
Kalastria Healer	2	B	1B	N/A	N/A
Kraum, Ludevic's Opus	2	UR	3UR	N/A	N/A
Breya, Etherium Shaper	2	WUBR	WUBR	N/A	N/A
Azra Oddsmaker	2	BR	1BR	N/A	N/A
Bloodthrone Vampire	2	B	1B	N/A	N/A
Felidar Guardian	2	W	3W	N/A	N/A
Kozilek, Butcher of Truth	2		10	N/A	N/A
Shimmer Myr	2		3	N/A	N/A
Warrior en-Kor	2	W	WW	N/A	N/A
Hagra Diabolist	2	B	4B	N/A	N/A
Sidisi, Undead Vizier	2	B	3BB	N/A	N/A
Fauna Shaman	2	G	1G	N/A	N/A
Nezahal, Primal Tide	1	U	5UU	N/A	N/A
Mausoleum Wanderer	1	U	U	N/A	N/A
Deceiver Exarch	1	U	2U	N/A	N/A
Reckless Bushwhacker	1	R	2R	N/A	1R
Vizier of the Menagerie	1	G	3G	N/A	N/A
Phyrexian Soulgorger	1		3	N/A	N/A
Prowling Serpopard	1	G	1GG	N/A	N/A
Mulldrifter	1	U	4U	N/A	2U
Purphoros, God of the Forge	1	R	3R	N/A	N/A
Melira, Sylvok Outcast	1	G	1G	N/A	N/A
Palinchron	1	U	5UU	N/A	N/A
Great Oak Guardian	1	G	5G	N/A	N/A
Eladamri, Lord of Leaves	1	G	GG	N/A	N/A
Kamahl, Fist of Krosa	1	G	4GG	N/A	N/A
Kiri-Onna	1	U	4U	N/A	N/A
Gray Merchant of Asphodel	1	B	3BB	N/A	N/A
Treasonous Ogre	1	R	3R	N/A	N/A
Krosan Wayfarer	1	G	G	N/A	N/A
Lupine Prototype	1		2	N/A	N/A
Sylvan Ranger	1	G	1G	N/A	N/A
Tishana, Voice of Thunder	1	UG	5GU	N/A	N/A
Wall of Blossoms	1	G	1G	N/A	N/A
Street Wraith	1	B	3BB	N/A	N/A
Torch Courier	1	R	R	N/A	N/A
Kiora's Follower	1	UG	GU	N/A	N/A
Birchlore Rangers	1	G	G	N/A	N/A
Goblin Sharpshooter	1	R	2R	N/A	N/A

Table 13: Creature sorted by count

Card	Decks	Color	Mana Cost	ACC	RCC
Momir Vig, Simic Visionary	1	UG	3GU	N/A	N/A
Mogis's Marauder	1	B	2B	N/A	N/A
Ikra Shidiqi, the Usurper	1	BG	3BG	N/A	N/A
Noose Constrictor	1	G	1G	N/A	N/A
Voyaging Satyr	1	G	1G	N/A	N/A
Body Double	1	U	4U	N/A	N/A
Meren of Clan Nel Toth	1	BG	2BG	N/A	N/A
Spirit of the Labyrinth	1	W	1W	N/A	N/A
Tetsuko Umezawa, Fugitive	1	U	1U	N/A	N/A
Loyal Drake	1	U	2U	N/A	N/A
Saffi Eriksdotter	1	WG	GW	N/A	N/A
Qasali Pridemage	1	WG	GW	N/A	N/A
Varolz, the Scar-Striped	1	BG	1BG	N/A	N/A
Wingrattle Scarecrow	1		3	N/A	N/A
Skullwinder	1	G	2G	N/A	N/A
Insolent Neonate	1	R	R	N/A	N/A
Nightveil Sprite	1	U	1U	N/A	N/A
Hellraiser Goblin	1	R	2R	N/A	N/A
Anger	1	R	3R	N/A	N/A
Brass Squire	1		3	N/A	N/A
Duskwatch Recruiter	1	G	1G	N/A	N/A
Dire Fleet Daredevil	1	R	1R	N/A	N/A
Generous Patron	1	G	2G	N/A	N/A
Karametra's Acolyte	1	G	3G	N/A	N/A
Dualcaster Mage	1	R	1RR	N/A	N/A
Beastcaller Savant	1	G	1G	N/A	N/A
Kraul Harpooner	1	G	1G	N/A	N/A
Cephalid Inkshrouder	1	U	2U	N/A	N/A
Leaden Myr	1	B	2	N/A	N/A
Weathered Wayfarer	1	W	W	N/A	N/A
Murderous Redcap	1	BR	2B/RB/R	N/A	N/A
Nantuko Tracer	1	G	1G	N/A	N/A
Morselhoarder	1	RG	4R/GR/G	N/A	N/A
Skirk Prospector	1	R	R	N/A	N/A
Lightning Mauler	1	R	1R	N/A	N/A
Sliver Queen	1	WUBRG	WUBRG	N/A	N/A
Junk Diver	1		3	N/A	N/A
Bruse Tarl, Boorish Herder	1	WR	2RW	N/A	N/A
Scion of the Ur-Dragon	1	WUBRG	WUBRG	N/A	N/A
Plague Myr	1		2	N/A	N/A
Thing in the Ice	1	U	1U	N/A	N/A
Whirlpool Warrior	1	UR	2U	N/A	N/A
Sun Titan	1	W	4WW	N/A	N/A
Slithermuse	1	U	2UU	N/A	3U
Animar, Soul of Elements	1	URG	GUR	N/A	N/A

Table 13: Creature sorted by count

Card	Decks	Color	Mana Cost	ACC	RCC
Ancestral Statue	1		4	N/A	N/A
Channeler Initiate	1	G	1G	N/A	N/A
Loyal Apprentice	1	R	1R	N/A	N/A
Pestermite	1	U	2U	N/A	N/A
Bloodghast	1	B	BB	N/A	N/A
Triton Shorestalker	1	U	U	N/A	N/A
Craterhoof Behemoth	1	G	5GGG	N/A	N/A
Goblin Welder	1	R	R	N/A	N/A
Gudul Lurker	1	U	U	N/A	N/A
Plaguecrafter	1	B	2B	N/A	N/A
Regal Force	1	G	4GGG	N/A	N/A
Arcbound Ravager	1		2	N/A	N/A
Ravaging Riftwurm	1	G	1GG	N/A	N/A
Sakura-Tribe Scout	1	G	G	N/A	N/A
Stormscape Familiar	1	U	1U	N/A	N/A
Rashmi, Eternities Crafter	1	UG	2GU	N/A	N/A
Niv-Mizzet, Dracogenius	1	UR	2UURR	N/A	N/A
Thought-Knot Seer	1		3C	N/A	N/A
The Mimeoplasm	1	UBG	2BGU	N/A	N/A
Goblin Matron	1	R	2R	N/A	N/A
Fiend Hunter	1	W	1WW	N/A	N/A
Genesis Hydra	1	G	XGG	N/A	N/A
Spire Tracer	1	G	G	N/A	N/A
Sidisi, Brood Tyrant	1	UBG	1BGU	N/A	N/A
Mother of Runes	1	W	W	N/A	N/A
Tendershoot Dryad	1	G	4G	N/A	N/A
Arcum Dagsson	1	U	3U	N/A	N/A
Selvala, Explorer Returned	1	WG	1GW	N/A	N/A
Reassembling Skeleton	1	B	1B	N/A	N/A
Dosan the Falling Leaf	1	G	1GG	N/A	N/A
Heart Warden	1	G	1G	N/A	N/A
Phyrexian Devourer	1		6	N/A	N/A
Godo, Bandit Warlord	1	R	5R	N/A	N/A
Sheltering Ancient	1	G	1G	N/A	N/A
Xantid Swarm	1	G	G	N/A	N/A
Gaea's Herald	1	G	1G	N/A	N/A
Slither Blade	1	U	U	N/A	N/A
Ulvenwald Tracker	1	G	G	N/A	N/A
Palladium Myr	1		3	N/A	N/A
Ravenous Slime	1	G	2G	N/A	N/A
Hedron Crawler	1		2	N/A	N/A
Spellstutter Sprite	1	U	1U	N/A	N/A
Ramunap Excavator	1	G	2G	N/A	N/A
Hapless Researcher	1	U	U	N/A	N/A
Etherium Sculptor	1	U	1U	N/A	N/A

Table 13: Creature sorted by count

Card	Decks	Color	Mana Cost	ACC	RCC
Scrap Trawler	1		3	N/A	N/A
Faerie Miscreant	1	U	U	N/A	N/A
Disciple of the Vault	1	B	B	N/A	N/A
Gorilla Shaman	1	R	R	N/A	N/A
The Ur-Dragon	1	WUBRG	4WUBRG	N/A	N/A
Golgari Grave-Troll	1	G	4G	N/A	N/A
Duplicant	1		6	N/A	N/A
Blisterpod	1		G	N/A	N/A
Prossh, Skyraider of Kher	1	BRG	3BRG	N/A	N/A
Blighted Bat	1	B	2B	N/A	N/A
Jeleva, Nephilia's Scourge	1	UBR	1UBR	N/A	N/A
Silver Myr	1	U	2	N/A	N/A
The Gitrog Monster	1	BG	3BG	N/A	N/A
Hangarback Walker	1		XX	N/A	N/A
Fierce Empath	1	G	2G	N/A	N/A
Mindslicer	1	B	2BB	N/A	N/A
Goblin Bushwhacker	1	R	R	N/A	N/A
Manakin	1		2	N/A	N/A
Heritage Druid	1	G	G	N/A	N/A
Looter il-Kor	1	U	1U	N/A	N/A
Captain Sisay	1	WG	2GW	N/A	N/A
Myr Retriever	1		2	N/A	N/A
Bond Beetle	1	G	G	N/A	N/A
Putrid Imp	1	B	B	N/A	N/A
Fleshbag Marauder	1	B	2B	N/A	N/A
Wingcrafter	1	U	U	N/A	N/A
Somberwald Sage	1	G	2G	N/A	N/A
Joraga Treespeaker	1	G	G	N/A	N/A
Sidisi's Faithful	1	U	U	N/A	N/A
Beast Whisperer	1	G	2GG	N/A	N/A
Smothering Abomination	1		2BB	N/A	N/A
Peregrine Drake	1	U	4U	N/A	N/A
Trinket Mage	1	U	2U	N/A	N/A
Goblin Dark-Dwellers	1	R	3RR	N/A	N/A
Grand Arbiter Augustin IV	1	WU	2WU	N/A	N/A
Treetop Scout	1	G	G	N/A	N/A
Elvish Visionary	1	G	1G	N/A	N/A
Anafenza, Kin-Tree Spirit	1	W	WW	N/A	N/A
Containment Priest	1	W	1W	N/A	N/A
Phyrexian Dreadnought	1		1	N/A	N/A
Dragon Mage	1	R	5RR	N/A	N/A
Sygg, River Cutthroat	1	UB	U/BU/B	N/A	N/A
Mist-Cloaked Herald	1	U	U	N/A	N/A
Phyrexian Metamorph	1	U	3U/P	3	N/A
Kederekt Leviathan	1	U	6UU	N/A	N/A

Table 13: Creature sorted by count

Card	Decks	Color	Mana Cost	ACC	RCC
Tinder Wall	1	RG	G	N/A	N/A
Hokori, Dust Drinker	1	W	2WW	N/A	N/A
Sire of Insanity	1	BR	4BR	N/A	N/A
Goblin Electromancer	1	UR	UR	N/A	N/A
Nettle Sentinel	1	G	G	N/A	N/A
Scryb Sprites	1	G	G	N/A	N/A

Table 14: Artifact sorted by count

Card	Decks	Color	Mana Cost	ACC	RCC
Mana Crypt	59		0	N/A	N/A
Sol Ring	58		1	N/A	N/A
Mox Diamond	57		0	N/A	N/A
Chrome Mox	57		0	N/A	N/A
Mana Vault	39		1	N/A	N/A
Lotus Petal	35		0	N/A	N/A
Fellwar Stone	30		2	N/A	N/A
Sensei's Divining Top	30		1	N/A	N/A
Grim Monolith	29		2	N/A	N/A
Mox Opal	25		0	N/A	N/A
Lion's Eye Diamond	22		0	N/A	N/A
Talisman of Dominance	21	UB	2	N/A	N/A
Isochron Scepter	19		2	N/A	N/A
Dimir Signet	17	UB	2	N/A	N/A
Paradox Engine	15		5	N/A	N/A
Grafdigger's Cage	10		1	N/A	N/A
Talisman of Progress	9	WU	2	N/A	N/A
Cursed Totem	8		2	N/A	N/A
Null Rod	8		2	N/A	N/A
Aetherflux Reservoir	8		4	N/A	N/A
Izzet Signet	8	UR	2	N/A	N/A
Simic Signet	7	UG	2	N/A	N/A
Walking Ballista	7		XX	N/A	N/A
Hope of Ghirapur	6		1	N/A	N/A
Helm of Awakening	6		2	N/A	N/A
Talisman of Indulgence	6	BR	2	N/A	N/A
Prismatic Lens	5		2	N/A	N/A
Memnite	5		0	N/A	N/A
Basalt Monolith	5		3	N/A	N/A
Voltaic Key	5		1	N/A	N/A
Skullclamp	5		1	N/A	N/A
Trinisphere	5		3	N/A	N/A
Mox Amber	5		0	N/A	N/A
Defense Grid	4		2	N/A	N/A
Rings of Brighthearth	4		3	N/A	N/A

Table 14: Artifact sorted by count

Card	Decks	Color	Mana Cost	ACC	RCC
Azorius Signet	4	WU	2	N/A	N/A
Everflowing Chalice	4		0	N/A	N/A
Ethersworn Canonist	4	W	1W	N/A	N/A
Thought Vessel	4		2	N/A	N/A
Scroll Rack	4		2	N/A	N/A
Birthing Pod	4	G	3G/P	3	N/A
Phyrexian Revoker	4		2	N/A	N/A
Mind Stone	4		2	N/A	N/A
Lightning Greaves	4		2	N/A	N/A
Sphere of Resistance	4		2	N/A	N/A
Shield Sphere	3		0	N/A	N/A
Nihil Spellbomb	3	B	1	N/A	N/A
Staff of Domination	3		3	N/A	N/A
Ornithopter	3		0	N/A	N/A
Sapphire Medallion	3		2	N/A	N/A
Vault of Whispers	2	B	0	N/A	N/A
Spellskite	2	U	2	N/A	N/A
Phyrexian Walker	2		0	N/A	N/A
Candelabra of Tawnos	2		1	N/A	N/A
Shuko	2		1	N/A	N/A
Serum Powder	2		3	N/A	N/A
Fractured Powerstone	2		2	N/A	N/A
Expedition Map	2		1	N/A	N/A
Metalworker	2		3	N/A	N/A
Shimmer Myr	2		3	N/A	N/A
Tangle Wire	2		3	N/A	N/A
Altar of Dementia	2		2	N/A	N/A
Memory Jar	2		5	N/A	N/A
Golgari Signet	2	BG	2	N/A	N/A
Myr Moonvessel	2		1	N/A	N/A
Umbral Mantle	2		3	N/A	N/A
Aether Spellbomb	2	U	1	N/A	N/A
Springleaf Drum	2		1	N/A	N/A
Lotus Bloom	2		0	N/A	N/A
Rakdos Signet	2	BR	2	N/A	N/A
Codex Shredder	2		1	N/A	N/A
Thorn of Amethyst	2		2	N/A	N/A
Orzhov Signet	2	WB	2	N/A	N/A
Breya, Etherium Shaper	2	WUBR	WUBR	N/A	N/A
Winter Orb	2		2	N/A	N/A
Thousand-Year Elixir	2		3	N/A	N/A
Jeweled Amulet	2		0	N/A	N/A
Jet Medallion	2		2	N/A	N/A
Thran Dynamo	2		4	N/A	N/A
The Chain Veil	1		4	N/A	N/A

Table 14: Artifact sorted by count

Card	Decks	Color	Mana Cost	ACC	RCC
Myr Retriever	1		2	N/A	N/A
Wingrattle Scarecrow	1		3	N/A	N/A
Argentum Armor	1		6	N/A	N/A
Chromatic Sphere	1		1	N/A	N/A
Krark-Clan Ironworks	1		4	N/A	N/A
Welding Jar	1		0	N/A	N/A
Pithing Needle	1		1	N/A	N/A
Darksteel Citadel	1		0	N/A	N/A
Hedron Crawler	1		2	N/A	N/A
Bow of Nylea	1	G	1GG	N/A	N/A
Sky Diamond	1	U	2	N/A	N/A
Panharmonicon	1		4	N/A	N/A
Duplicant	1		6	N/A	N/A
Leaden Myr	1	B	2	N/A	N/A
Plague Myr	1		2	N/A	N/A
Junk Diver	1		3	N/A	N/A
Wayfarer's Bauble	1		1	N/A	N/A
Chalice of the Void	1		XX	N/A	N/A
Honor-Worn Shaku	1		3	N/A	N/A
Worn Powerstone	1		3	N/A	N/A
Lupine Prototype	1		2	N/A	N/A
Ancestral Statue	1		4	N/A	N/A
Arcbound Ravager	1		2	N/A	N/A
Mishra's Bauble	1		0	N/A	N/A
Urza's Bauble	1		0	N/A	N/A
Guardian Idol	1		2	N/A	N/A
Cloudstone Curio	1		3	N/A	N/A
Silent Gravestone	1		1	N/A	N/A
Talisman of Impulse	1	RG	2	N/A	N/A
Phyrexian Soulgorger	1		3	N/A	N/A
Brass Squire	1		3	N/A	N/A
Great Furnace	1	R	0	N/A	N/A
Hammer of Nazahn	1		4	N/A	N/A
Phyrexian Devourer	1		6	N/A	N/A
Palladium Myr	1		3	N/A	N/A
Altar of the Brood	1		1	N/A	N/A
Gilded Lotus	1		5	N/A	N/A
Spine of Ish Sah	1		7	N/A	N/A
Citanul Flute	1		5	N/A	N/A
Etherium Sculptor	1	U	1U	N/A	N/A
Seat of the Synod	1	U	0	N/A	N/A
Chromatic Star	1		1	N/A	N/A
Silver Myr	1	U	2	N/A	N/A
Hangarback Walker	1		XX	N/A	N/A
Phyrexian Dreadnought	1		1	N/A	N/A

Table 14: Artifact sorted by count

Card	Decks	Color	Mana Cost	ACC	RCC
Conjurer's Bauble	1		1	N/A	N/A
Manakin	1		2	N/A	N/A
Astral Cornucopia	1		XXX	N/A	N/A
Spawning Pit	1		2	N/A	N/A
Static Orb	1		3	N/A	N/A
Helm of the Host	1		4	N/A	N/A
Scrap Trawler	1		3	N/A	N/A
Phyrexian Metamorph	1	U	3U/P	3	N/A

Table 15: Enchantment sorted by count

Card	Decks	Color	Mana Cost	ACC	RCC
Mystic Remora	42	U	U	N/A	N/A
Carpet of Flowers	40	G	G	N/A	N/A
Sylvan Library	37	G	1G	N/A	N/A
Necropotence	23	B	BBB	N/A	N/A
Survival of the Fittest	18	G	1G	N/A	N/A
Copy Artifact	18	U	1U	N/A	N/A
Animate Dead	17	B	1B	N/A	N/A
Necromancy	17	B	2B	N/A	N/A
Wild Growth	16	G	G	N/A	N/A
Utopia Sprawl	14	G	G	N/A	N/A
Rhystic Study	12	U	2U	N/A	N/A
Dance of the Dead	11	B	1B	N/A	N/A
Exploration	8	G	G	N/A	N/A
Root Maze	5	G	G	N/A	N/A
Rest in Peace	4	W	1W	N/A	N/A
Food Chain	4	G	2G	N/A	N/A
Pattern of Rebirth	4	G	3G	N/A	N/A
Stranglehold	4	R	3R	N/A	N/A
Eidolon of Rhetoric	4	W	2W	N/A	N/A
Stony Silence	4	W	1W	N/A	N/A
Compost	3	G	1G	N/A	N/A
Freed from the Real	3	U	2U	N/A	N/A
Smothering Tithe	3	W	3W	N/A	N/A
Pernicious Deed	3	BG	1BG	N/A	N/A
Aura of Silence	3	W	1WW	N/A	N/A
Grasp of Fate	3	W	1WW	N/A	N/A
Back to Basics	3	U	2U	N/A	N/A
Blood Moon	3	R	2R	N/A	N/A
Mirri's Guile	3	G	G	N/A	N/A
Earthcraft	2	G	1G	N/A	N/A
Druuids' Repository	2	G	1GG	N/A	N/A
Keen Sense	2	G	G	N/A	N/A
Song of the Dryads	2	G	2G	N/A	N/A

Table 15: Enchantment sorted by count

Card	Decks	Color	Mana Cost	ACC	RCC
Counterbalance	2	U	UU	N/A	N/A
Nature's Will	2	G	2GG	N/A	N/A
Concordant Crossroads	2	G	G	N/A	N/A
Goblin Bombardment	2	R	1R	N/A	N/A
Curiosity	2	U	U	N/A	N/A
Leyline of the Void	2	B	2BB	N/A	N/A
Squandered Resources	2	BG	BG	N/A	N/A
Splinter Twin	2	R	2RR	N/A	N/A
Power Artifact	2	U	UU	N/A	N/A
Waste Not	2	B	1B	N/A	N/A
Training Grounds	2	U	U	N/A	N/A
Chains of Mephistopheles	2	B	1B	N/A	N/A
Rule of Law	2	W	2W	N/A	N/A
Squirrel Nest	2	G	1GG	N/A	N/A
Burgeoning	1	G	G	N/A	N/A
Phyrexian Unlife	1	W	2W	N/A	N/A
Mass Hysteria	1	R	R	N/A	N/A
Possibility Storm	1	R	3RR	N/A	N/A
City of Solitude	1	G	2G	N/A	N/A
Oblivion Crown	1	B	1B	N/A	N/A
Oppression	1	B	1BB	N/A	N/A
Stasis	1	U	1U	N/A	N/A
Blind Obedience	1	W	1W	N/A	N/A
Need for Speed	1	R	R	N/A	N/A
Luminarch Ascension	1	W	1W	N/A	N/A
Humility	1	W	2WW	N/A	N/A
Greater Good	1	G	2GG	N/A	N/A
Contamination	1	B	2B	N/A	N/A
Thousand-Year Storm	1	UR	4UR	N/A	N/A
Lignify	1	G	1G	N/A	N/A
Suppression Field	1	W	1W	N/A	N/A
Spirit of the Labyrinth	1	W	1W	N/A	N/A
Verity Circle	1	U	2U	N/A	N/A
Search for Azcanta	1	U	1U	N/A	N/A
Purphoros, God of the Forge	1	R	3R	N/A	N/A
Intruder Alarm	1	U	2U	N/A	N/A
Bow of Nylea	1	G	1GG	N/A	N/A

Table 16: Instant sorted by count

Card	Decks	Color	Mana Cost	ACC	RCC
Vampiric Tutor	47	B	B	N/A	N/A
Mystical Tutor	43	U	U	N/A	N/A
Brainstorm	41	U	U	N/A	N/A
Mental Misstep	41	U	U/P	0	N/A

Table 16: Instant sorted by count

Card	Decks	Color	Mana Cost	ACC	RCC
Swan Song	40	U	U	N/A	N/A
Pact of Negation	37	U	0	N/A	N/A
Force of Will	37	U	3UU	0	N/A
Flusterstorm	36	U	U	N/A	N/A
Chain of Vapor	35	U	U	N/A	N/A
Mana Drain	34	U	UU	N/A	N/A
Nature's Claim	34	G	G	N/A	N/A
Dark Ritual	33	B	B	N/A	N/A
Dispel	33	U	U	N/A	N/A
Noxious Revival	33	G	G/P	0	N/A
Lim-Dûl's Vault	31	UB	UB	N/A	N/A
Ad Nauseam	31	B	3BB	N/A	N/A
Delay	31	U	1U	N/A	N/A
Abrupt Decay	28	BG	BG	N/A	N/A
Cyclonic Rift	28	U	1U	N/A	N/A
Enlightened Tutor	28	W	W	N/A	N/A
Dramatic Reversal	23	U	1U	N/A	N/A
Cabal Ritual	22	B	1B	N/A	N/A
Negate	22	U	1U	N/A	N/A
Spell Pierce	22	U	U	N/A	N/A
Silence	21	W	W	N/A	N/A
Entomb	21	B	B	N/A	N/A
Counterspell	19	U	UU	N/A	N/A
Assassin's Trophy	19	BG	BG	N/A	N/A
Swords to Plowshares	18	W	W	N/A	N/A
Worldly Tutor	18	G	G	N/A	N/A
Pyroblast	18	R	R	N/A	N/A
Frantic Search	17	U	2U	N/A	N/A
Tainted Pact	17	B	1B	N/A	N/A
Fire Covenant	17	BR	1BR	N/A	N/A
Intuition	16	U	2U	N/A	N/A
Impulse	15	U	1U	N/A	N/A
Crop Rotation	12	G	G	N/A	N/A
Red Elemental Blast	12	R	R	N/A	N/A
Angel's Grace	11	W	W	N/A	N/A
Demonic Consultation	11	B	B	N/A	N/A
Winds of Rebuke	10	U	1U	N/A	N/A
Summoner's Pact	10	G	0	N/A	N/A
Eladamri's Call	10	WG	GW	N/A	N/A
Flash	9	U	1U	N/A	N/A
Culling the Weak	8	B	B	N/A	N/A
High Tide	7	U	U	N/A	N/A
Natural State	7	G	G	N/A	N/A
Rain of Filth	7	B	B	N/A	N/A
Opt	6	U	U	N/A	N/A

Table 16: Instant sorted by count

Card	Decks	Color	Mana Cost	ACC	RCC
Autumn's Veil	6	G	G	N/A	N/A
Dig Through Time	6	U	6UU	N/A	UU
Into the Roil	6	U	1U	N/A	N/A
Plunge into Darkness	6	B	1B	N/A	N/A
Beast Within	6	G	2G	N/A	N/A
Fact or Fiction	6	U	3U	N/A	N/A
Pongify	6	U	U	N/A	N/A
Chord of Calling	5	G	XGGG	N/A	0
Gush	5	U	4U	0	N/A
Reality Shift	5	U	1U	N/A	N/A
Shallow Grave	5	B	1B	N/A	N/A
Memory's Journey	5	U	1U	N/A	N/A
Muddle the Mixture	5	U	UU	N/A	N/A
Mana Leak	4	U	1U	N/A	N/A
Whir of Invention	4	U	XUUU	N/A	XUUU
Abrade	4	R	1R	N/A	N/A
Pull from Tomorrow	4	U	XUU	N/A	N/A
Snap	4	U	1U	N/A	N/A
Misdirection	4	U	3UU	0	N/A
Wear // Tear	3	WR	1R // W	N/A	N/A
Izzet Charm	3	UR	UR	N/A	N/A
Slaughter Pact	3	B	0	N/A	N/A
Seething Song	3	R	2R	N/A	N/A
Stroke of Genius	3	U	X2U	N/A	N/A
Manamorphose	3	RG	1R/G	N/A	N/A
Rapid Hybridization	3	U	U	N/A	N/A
Hurkyl's Recall	3	U	1U	N/A	N/A
Path to Exile	2	W	W	N/A	N/A
Thirst for Knowledge	2	U	2U	N/A	N/A
Kozilek's Return	2		2R	N/A	N/A
Stifle	2	U	U	N/A	N/A
Benefactor's Draught	2	G	1G	N/A	N/A
Final Fortune	2	R	RR	N/A	N/A
Flash of Insight	2	U	X1U	N/A	N/A
Remand	2	U	1U	N/A	N/A
Rebuild	2	U	2U	N/A	N/A
Guttural Response	2	RG	R/G	N/A	N/A
Submerge	2	U	4U	N/A	N/A
Stubborn Denial	2	U	U	N/A	N/A
Blue Sun's Zenith	2	U	XUUU	N/A	N/A
Obsessive Search	2	U	U	N/A	U
Sleight of Mind	1	U	U	N/A	N/A
Dimir Charm	1	UB	UB	N/A	N/A
Thought Scour	1	U	U	N/A	N/A
Pyretic Ritual	1	R	1R	N/A	N/A

Table 16: Instant sorted by count

Card	Decks	Color	Mana Cost	ACC	RCC
Lightning Bolt	1	R	R	N/A	N/A
Vines of Vastwood	1	G	G	N/A	N/A
Mission Briefing	1	U	UU	N/A	N/A
Mogg Salvage	1	R	2R	N/A	N/A
Predict	1	U	1U	N/A	N/A
Disenchant	1	W	1W	N/A	N/A
Desperate Ritual	1	R	1R	N/A	N/A
Mana Tithe	1	W	W	N/A	N/A
Fork	1	R	RR	N/A	N/A
Sacrifice	1	B	B	N/A	N/A
Mind Bend	1	U	U	N/A	N/A
Unified Will	1	U	1U	N/A	N/A
Thunderclap	1	R	2R	0	N/A
Songs of the Damned	1	B	B	N/A	N/A
Rending Volley	1	R	R	N/A	N/A
Chaos Warp	1	R	2R	N/A	N/A
Berserk	1	G	G	N/A	N/A
Unwind	1	U	2U	N/A	N/A
Corpse Dance	1	B	2B	N/A	N/A
Mystic Confluence	1	U	3UU	N/A	N/A
Deglamer	1	G	1G	N/A	N/A
Mausoleum Secrets	1	B	1B	N/A	N/A
Turnabout	1	U	2UU	N/A	N/A
Reclaim	1	G	G	N/A	N/A
Savage Summoning	1	G	G	N/A	N/A
Ancient Animus	1	G	1G	N/A	N/A
Ricochet Trap	1	R	3R	R	N/A
Goryo's Vengeance	1	B	1B	N/A	N/A
Zealous Persecution	1	WB	WB	N/A	N/A
Might of Old Krosa	1	G	G	N/A	N/A
Unsubstantiate	1	U	1U	N/A	N/A
Nexus of Fate	1	U	5UU	N/A	N/A
Magnetic Theft	1	R	R	N/A	N/A
Spectral Shift	1	U	1U	N/A	N/A
Quicken	1	U	U	N/A	N/A
Shadow of Doubt	1	UB	U/BU/B	N/A	N/A
Daze	1	U	1U	0	N/A
Alter Reality	1	U	1U	N/A	N/A
Reap	1	G	1G	N/A	N/A
Glamerdye	1	U	1U	N/A	N/A
Pull from Eternity	1	W	W	N/A	N/A
Divergent Transformations	1	R	6R	N/A	N/A
Invigorate	1	G	2G	0	N/A
Anticipate	1	U	1U	N/A	N/A
Groundswell	1	G	G	N/A	N/A

Table 16: Instant sorted by count

Card	Decks	Color	Mana Cost	ACC	RCC
Pulse of the Grid	1	U	1UU	N/A	N/A
Whim of Volrath	1	U	U	N/A	N/A
Prohibit	1	U	1U	N/A	N/A
Momentous Fall	1	G	2GG	N/A	N/A
Darkblast	1	B	B	N/A	N/A

Table 17: Sorcery sorted by count

Card	Decks	Color	Mana Cost	ACC	RCC
Demonic Tutor	47	B	1B	N/A	N/A
Imperial Seal	47	B	B	N/A	N/A
Ponder	37	U	U	N/A	N/A
Preordain	32	U	U	N/A	N/A
Timetwister	30	U	2U	N/A	N/A
Gitaxian Probe	28	U	U/P	0	N/A
Windfall	25	U	2U	N/A	N/A
Yawgmoth's Will	24	B	2B	N/A	N/A
Toxic Deluge	24	B	2B	N/A	N/A
Diabolic Intent	22	B	1B	N/A	N/A
Wheel of Fortune	17	R	2R	N/A	N/A
Reanimate	16	B	B	N/A	N/A
Gamble	15	R	R	N/A	N/A
Merchant Scroll	14	U	1U	N/A	N/A
Green Sun's Zenith	13	G	XG	N/A	N/A
Praetor's Grasp	11	B	1BB	N/A	N/A
Regrowth	10	G	1G	N/A	N/A
Cabal Therapy	10	B	B	N/A	N/A
Life // Death	9	BG	G // 1B	N/A	N/A
Grim Tutor	8	B	1BB	N/A	N/A
Thoughtseize	8	B	B	N/A	N/A
Buried Alive	7	B	2B	N/A	N/A
Eldritch Evolution	7	G	1GG	N/A	N/A
Sleight of Hand	7	U	U	N/A	N/A
Dark Petition	7	B	3BB	N/A	N/A
Doomsday	6	B	BBB	N/A	N/A
Dread Return	6	B	2BB	N/A	N/A
Rolling Earthquake	6	R	XR	N/A	N/A
Mind's Desire	5	U	4UU	N/A	N/A
Night's Whisper	5	B	1B	N/A	N/A
Sylvan Tutor	5	G	G	N/A	N/A
Natural Order	5	G	2GG	N/A	N/A
Transmute Artifact	5	U	UU	N/A	N/A
Faithless Looting	4	R	R	N/A	N/A
Chart a Course	4	U	1U	N/A	N/A
Duress	4	B	B	N/A	N/A

Table 17: Sorcery sorted by count

Card	Decks	Color	Mana Cost	ACC	RCC
Rite of Flame	3	R	R	N/A	N/A
Careful Study	3	U	U	N/A	N/A
Inquisition of Kozilek	3	B	B	N/A	N/A
Mnemonic Betrayal	3	UB	1UB	N/A	N/A
Massacre	3	B	2BB	N/A	N/A
Postmortem Lunge	3	B	XB/P	X	N/A
Exhume	3	B	1B	N/A	N/A
Sickening Dreams	2	B	1B	N/A	N/A
Ancestral Vision	2	U	0	N/A	N/A
Winds of Change	2	R	R	N/A	N/A
Personal Tutor	2	U	U	N/A	N/A
Deep Analysis	2	U	3U	N/A	N/A
Weird Harvest	2	G	XGG	N/A	N/A
Glimpse of Nature	2	G	G	N/A	N/A
Summer Bloom	2	G	1G	N/A	N/A
Time Spiral	2	U	4UU	N/A	N/A
Twinflame	2	R	1R	N/A	N/A
Life from the Loam	2	G	1G	N/A	N/A
Fabricate	2	U	2U	N/A	N/A
Deathmark	2	B	B	N/A	N/A
Treasure Cruise	2	U	7U	N/A	U
Collective Brutality	2	B	1B	N/A	N/A
Seasons Past	2	G	4GG	N/A	N/A
Bubbling Muck	2	B	B	N/A	N/A
Exsanguinate	2	B	XBB	N/A	N/A
Enter the Infinite	2	U	8UUUU	N/A	N/A
Dimir Machinations	1	B	2B	N/A	N/A
Tooth and Nail	1	G	5GG	N/A	N/A
Manifold Insights	1	U	2U	N/A	N/A
Shattering Spree	1	R	R	N/A	N/A
Uncage the Menagerie	1	G	XGG	N/A	N/A
Past in Flames	1	R	3R	N/A	N/A
Life's Legacy	1	G	1G	N/A	N/A
Nature's Lore	1	G	1G	N/A	N/A
Serum Visions	1	U	U	N/A	N/A
Pyroclasm	1	R	1R	N/A	N/A
Sylvan Scrying	1	G	1G	N/A	N/A
Phytoburst	1	G	1G	N/A	N/A
Recurring Insight	1	U	4UU	N/A	N/A
Urza's Ruinous Blast	1	W	4W	N/A	N/A
Gaea's Blessing	1	G	1G	N/A	N/A
Land Grant	1	G	1G	0	N/A
Time Warp	1	U	3UU	N/A	N/A
Altar of Bone	1	WG	GW	N/A	N/A
Reshape	1	U	XUU	N/A	N/A

Table 17: Sorcery sorted by count

Card	Decks	Color	Mana Cost	ACC	RCC
Victimize	1	B	2B	N/A	N/A
Capture of Jingzhou	1	U	3UU	N/A	N/A
Temporal Mastery	1	U	5UU	N/A	1U
Wheel of Fate	1	R	0	N/A	N/A
Bonus Round	1	R	1RR	N/A	N/A
Vandalblast	1	R	R	N/A	N/A
Whispering Madness	1	UB	2UB	N/A	N/A
Primal Command	1	G	3GG	N/A	N/A
Part the Waterveil	1	U	4UU	N/A	N/A
Karn's Temporal Sundering	1	U	4UU	N/A	N/A
Ravages of War	1	W	3W	N/A	N/A
Trait Doctoring	1	U	U	N/A	N/A
Diminishing Returns	1	U	2UU	N/A	N/A
Footsteps of the Goryo	1	B	2B	N/A	N/A
Three Visits	1	G	1G	N/A	N/A
Fragmentize	1	W	W	N/A	N/A
Devastation Tide	1	U	3UU	N/A	1U
Genesis Wave	1	G	XGGG	N/A	N/A
Manipulate Fate	1	U	1U	N/A	N/A
Temporal Trespass	1	U	8UUU	N/A	UUU
Maximize Velocity	1	R	R	N/A	N/A
Extract	1	U	U	N/A	N/A
Notorious Throng	1	U	3U	N/A	5U
Soul's Majesty	1	G	4G	N/A	N/A
Infernal Plunge	1	R	R	N/A	N/A
Temporal Manipulation	1	U	3UU	N/A	N/A
By Force	1	R	XR	N/A	N/A
Show and Tell	1	U	2U	N/A	N/A
Heat Shimmer	1	R	2R	N/A	N/A
Last Chance	1	R	RR	N/A	N/A
Walk the Aeons	1	U	4UU	N/A	N/A
Foresight	1	U	1U	N/A	N/A
Rishkar's Expertise	1	G	4GG	N/A	N/A
Armageddon	1	W	3W	N/A	N/A
Final Parting	1	B	3BB	N/A	N/A

A.3 Tables for Section 2.3: Alternate and Reduced Casting Cost

Table 18: Alternate Casting Cost

Card	Decks	Type	ACC	Delta
Mental Misstep	41	Instant	0	-1
Force of Will	37	Instant	0	-5
Noxious Revival	33	Instant	0	-1
Gitaxian Probe	28	Sorcery	0	-1

Table 18: Alternate Casting Cost

Card	Decks	Type	ACC	Delta
Gush	5	Instant	0	-5
Misdirection	4	Instant	0	-5
Birthing Pod	4	Artifact	3	-1
Postmortem Lunge	3	Sorcery	X	-1
Invigorate	1	Instant	0	-3
Phyrexian Metamorph	1	Artifact	Creature	3
Land Grant	1	Sorcery	0	-2
Daze	1	Instant	0	-2
Thunderclap	1	Instant	0	-3
Ricochet Trap	1	Instant	R	-3

Table 19: Reduced Casting Cost

Card	Decks	Type	ACC	Delta
Dig Through Time	6	Instant	UU	-6
Chord of Calling	5	Instant	0	-3
Tasigur, the Golden Fang	2	Creature	B	-5
Treasure Cruise	2	Sorcery	U	-7
Reckless Bushwhacker	1	Creature	1R	-1
Temporal Mastery	1	Sorcery	1U	-5
Mulldrifter	1	Creature	2U	-2
Devastation Tide	1	Sorcery	1U	-3
Temporal Trespass	1	Sorcery	UUU	-8

A.4 Tables for Section 2.4: Multiple Mana

Table 20: Multiple mana sorted by count

Card	Decks	Cost	CMC	Type
Force of Will	37	3UU	5	Instant
Mana Drain	34	UU	2	Instant
Ad Nauseam	31	3BB	5	Instant
Necropotence	23	BBB	3	Enchantment
Counterspell	19	UU	2	Instant
Eternal Witness	15	1GG	3	Creature
Protean Hulk	12	5GG	7	Creature
Praetor's Grasp	11	1BB	3	Sorcery
Grand Abolisher	9	WW	2	Creature
Razaketh, the Foulblooded	9	5BBB	8	Creature
Grim Tutor	8	1BB	3	Sorcery
Eldritch Evolution	7	1GG	3	Sorcery
Dark Petition	7	3BB	5	Sorcery
Dig Through Time	6	6UU	8	Instant
Doomsday	6	BBB	3	Sorcery

Table 20: Multiple mana sorted by count

Card	Decks	Cost	CMC	Type
Leonin Relic-Warder	6	WW	2	Creature
Runic Armasaur	6	1GG	3	Creature
Dread Return	6	2BB	4	Sorcery
Chord of Calling	5	XGGG	3	Instant
Consecrated Sphinx	5	4UU	6	Creature
Linvala, Keeper of Silence	5	2WW	4	Creature
Jin-Gitaxias, Core Augur	5	8UU	10	Creature
Natural Order	5	2GG	4	Sorcery
Mind's Desire	5	4UU	6	Sorcery
Muddle the Mixture	5	UU	2	Instant
Transmute Artifact	5	UU	2	Sorcery
Body Snatcher	4	2BB	4	Creature
Whir of Invention	4	XUUU	3	Instant
Pull from Tomorrow	4	XUU	2	Instant
Seedborn Muse	4	3GG	5	Creature
Misdirection	4	3UU	5	Instant
Angel of Glory's Rise	4	5WW	7	Creature
Squee, the Immortal	3	1RR	3	Creature
Phyrexian Delver	3	3BB	5	Creature
Elesh Norn, Grand Cenobite	3	5WW	7	Creature
Vexing Shusher	3	R/GR/G	2	Creature
Aura of Silence	3	1WW	3	Enchantment
Bane of Progress	3	4GG	6	Creature
Temur Sabertooth	3	2GG	4	Creature
Karmic Guide	3	3WW	5	Creature
Kiki-Jiki, Mirror Breaker	3	2RRR	5	Creature
Necrotic Ooze	3	2BB	4	Creature
Grasp of Fate	3	1WW	3	Enchantment
Worldgorger Dragon	3	3RRR	6	Creature
Massacre	3	2BB	4	Sorcery
Druids' Repository	2	1GG	3	Enchantment
Squirrel Nest	2	1GG	3	Enchantment
Splinter Twin	2	2RR	4	Enchantment
Weird Harvest	2	XGG	2	Sorcery
Misthollow Griffin	2	2UU	4	Creature
Woodland Bellower	2	4GG	6	Creature
Somberwald Stag	2	3GG	5	Creature
Leyline of the Void	2	2BB	4	Enchantment
Time Spiral	2	4UU	6	Sorcery
Counterbalance	2	UU	2	Enchantment
Final Fortune	2	RR	2	Instant
Selvala, Heart of the Wilds	2	1GG	3	Creature
Seasons Past	2	4GG	6	Sorcery
Mikaeus, the Unhallowed	2	3BBB	6	Creature
Exsanguinate	2	XBB	2	Sorcery

Table 20: Multiple mana sorted by count

Card	Decks	Cost	CMC	Type
Blue Sun's Zenith	2	XUUU	3	Instant
Nature's Will	2	2GG	4	Enchantment
Warrior en-Kor	2	WW	2	Creature
Enter the Infinite	2	8UUUU	12	Sorcery
Power Artifact	2	UU	2	Enchantment
Sidisi, Undead Vizier	2	3BB	5	Creature
Tooth and Nail	1	5GG	7	Sorcery
Prowling Serpopard	1	1GG	3	Creature
Palinchron	1	5UU	7	Creature
Eladamri, Lord of Leaves	1	GG	2	Creature
Uncage the Menagerie	1	XGG	2	Sorcery
Gray Merchant of Asphodel	1	3BB	5	Creature
Kamahl, Fist of Krosa	1	4GG	6	Creature
Greater Good	1	2GG	4	Enchantment
Street Wraith	1	3BB	5	Creature
Mindslicer	1	2BB	4	Creature
Goblin Dark-Dwellers	1	3RR	5	Creature
Mission Briefing	1	UU	2	Instant
Recurring Insight	1	4UU	6	Sorcery
Teferi, Temporal Archmage	1	4UU	6	Planeswalker
Bow of Nylea	1	1GG	3	Enchantment Artifact
Time Warp	1	3UU	5	Sorcery
Reshape	1	XUU	2	Sorcery
Nezahal, Primal Tide	1	5UU	7	Creature
Fork	1	RR	2	Instant
Capture of Jingzhou	1	3UU	5	Sorcery
Temporal Mastery	1	5UU	7	Sorcery
Bonus Round	1	1RR	3	Sorcery
Dosan the Falling Leaf	1	1GG	3	Creature
Sun Titan	1	4WW	6	Creature
Slithermuse	1	2UU	4	Creature
Garruk, Primal Hunter	1	2GGG	5	Planeswalker
Primal Command	1	3GG	5	Sorcery
Bloodghast	1	BB	2	Creature
Craterhoof Behemoth	1	5GGG	8	Creature
Regal Force	1	4GGG	7	Creature
Part the Waterveil	1	4UU	6	Sorcery
Mystic Confluence	1	3UU	5	Instant
Ravaging Riftwurm	1	1GG	3	Creature
Niv-Mizzet, Dracogenius	1	2UURR	6	Creature
Karn's Temporal Sundering	1	4UU	6	Sorcery
Genesis Hydra	1	XGG	2	Creature
Anafenza, Kin-Tree Spirit	1	WW	2	Creature
Possibility Storm	1	3RR	5	Enchantment
Fiend Hunter	1	1WW	3	Creature

Table 20: Multiple mana sorted by count

Card	Decks	Cost	CMC	Type
Turnabout	1	2UU	4	Instant
Oppression	1	1BB	3	Enchantment
Humility	1	2WW	4	Enchantment
Diminishing Returns	1	2UU	4	Sorcery
Murderous Redcap	1	2B/RB/R	4	Creature
Devastation Tide	1	3UU	5	Sorcery
Morselhoarder	1	4R/GR/G	6	Creature
Genesis Wave	1	XGGG	3	Sorcery
Nexus of Fate	1	5UU	7	Instant
Temporal Trespass	1	8UUU	11	Sorcery
Dualcaster Mage	1	1RR	3	Creature
Shadow of Doubt	1	U/BU/B	2	Instant
Temporal Manipulation	1	3UU	5	Sorcery
Kederekt Leviathan	1	6UU	8	Creature
Beast Whisperer	1	2GG	4	Creature
Smothering Abomination	1	2BB	4	Creature
Pulse of the Grid	1	1UU	3	Instant
Tezzeret the Seeker	1	3UU	5	Planeswalker
Last Chance	1	RR	2	Sorcery
Walk the Aeons	1	4UU	6	Sorcery
Momentous Fall	1	2GG	4	Instant
Dragon Mage	1	5RR	7	Creature
Sygg, River Cutthroat	1	U/BU/B	2	Creature
Rishkar's Expertise	1	4GG	6	Sorcery
Hokori, Dust Drinker	1	2WW	4	Creature
Final Parting	1	3BB	5	Sorcery

A.5 Tables for Section 2.5: Ability and Keywords

Table 21: Keywords sorted by unique count

Keyword	Total Count	Unique Count
Flying	159	43
Flash	64	16
Flashback	31	8
Haste	11	8
Equip	16	7
Trample	21	7
Partner	42	7
Defender	12	5
Cycling	8	5
Kicker	10	5
Delve	11	4
Entwine	8	3
Reach	3	3

Table 21: Keywords sorted by unique count

Keyword	Total Count	Unique Count
Deathtouch	4	3
Devoid	4	3
Protection	6	3
Menace	3	3
Transmute	6	2
Exploit	3	2
Cipher	2	2
Unearth	5	2
Lifelink	21	2
Soulbond	2	2
Overload	29	2
Storm	41	2
Indestructible	2	2
Vigilance	4	2
Exalted	16	2
Buyback	2	2
Splice	2	2
First strike	4	2
Miracle	2	2
Evoke	2	2
Improvise	4	1
Madness	2	1
Ascend	1	1
Level up	1	1
Echo	3	1
Jump	1	1
Cumulative upkeep	42	1
Intimidate	2	1
Retrace	1	1
Replicate	1	1
Infect	1	1
Extort	1	1
Multikicker	4	1
Megamorph	1	1
Rebound	1	1
Persist	1	1
Convoke	5	1
Shadow	1	1
Undaunted	1	1
Split second	11	1
Morph	1	1
Prowl	1	1
Surge	1	1
Landwalk	1	1
Fuse	3	1

Table 21: Keywords sorted by unique count

Keyword	Total Count	Unique Count
Dethrone	1	1

Table 22: Ability Words sorted by unique count

Ability Word	Total Count	Unique Count
Threshold	30	4
Imprint	77	3
Landfall	2	2
Lieutenant	2	2
Spell mastery	7	1
Ferocious	2	1
Parley	1	1
Delirium	2	1
Rally	2	1
Eminence	1	1
Strive	2	1
Metalcraft	25	1

A.6 Tables for Section 2.6: ETBs and Triggered Abilities

Table 23: Hard-coded exclusion triggers

Artifacts:	Mana Crypt	Mana Vault	
Lands:	City of Brass	Forbidden Orchard	City of Traitors
Instants:	Pact of Negation	Pact of the Titan	Intervention Pact
	Summoner's Pact		Slaughter Pact

Table 24: ETBs sorted by count

Card	Decks	Triggered By	Type
Gilded Drake	21	Self	Creature
Necromancy	17	Self	Enchantment
Animate Dead	17	Self	Enchantment
Eternal Witness	15	Self	Creature
Dance of the Dead	11	Self	Enchantment
Spellseeker	10	Self	Creature
Snapcaster Mage	6	Self	Creature
Riftsweeper	6	Self	Creature
Leonin Relic-Warder	6	Self	Creature
Reclamation Sage	5	Self	Creature
Body Snatcher	4	Self	Creature
Rest in Peace	4	Self	Enchantment
Angel of Glory's Rise	4	Self	Creature
Phyrexian Delver	3	Self	Creature

Table 24: ETBs sorted by count

Card	Decks	Triggered By	Type
Grasp of Fate	3	Self	Enchantment
Karmic Guide	3	Self	Creature
Bane of Progress	3	Self	Creature
Imperial Recruiter	3	Self	Creature
Worldgorger Dragon	3	Self	Creature
Cloud of Faeries	2	Self	Creature
Rishkar, Peema Renegade	2	Self	Creature
Halimar Excavator	2	Either-Or	Creature
Wood Elves	2	Self	Creature
Derevi, Empyrial Tactician	2	Self	Creature
Village Bell-Ringer	2	Self	Creature
Woodland Bellower	2	Self	Creature
Somberwald Stag	2	Self	Creature
General Tazri	2	Self	Creature
Bojuka Bog	2	Self	Land
Kalastria Healer	2	Either-Or	Creature
Manglehorn	2	Self	Creature
Selvala, Heart of the Wilds	2	Other	Creature
Breya, Etherium Shaper	2	Self	Artifact Creature
Felidar Guardian	2	Self	Creature
Hagra Diabolist	2	Either-Or	Creature
Reckless Bushwhacker	1	Self	Creature
Mausoleum Wanderer	1	Other	Creature
Kiri-Onna	1	Self	Creature
Mulldrifter	1	Self	Creature
Purphoros, God of the Forge	1	Other	Enchantment Creature
Palinchron	1	Self	Creature
Great Oak Guardian	1	Self	Creature
Gray Merchant of Asphodel	1	Self	Creature
Regal Force	1	Self	Creature
Wall of Blossoms	1	Self	Creature
Phyrexian Dreadnought	1	Self	Artifact Creature
Fleshbag Marauder	1	Self	Creature
Plaguecrafter	1	Self	Creature
Goblin Dark-Dwellers	1	Self	Creature
Skullwinder	1	Self	Creature
Dire Fleet Daredevil	1	Self	Creature
Sidisi, Brood Tyrant	1	Self	Creature
Nantuko Tracer	1	Self	Creature
Lightning Mauler	1	Either-Or	Creature
Deceiver Exarch	1	Self	Creature
Generous Patron	1	Self	Creature
Whirlpool Warrior	1	Self	Creature
Sun Titan	1	Self	Creature
Ancestral Statue	1	Self	Artifact Creature

Table 24: ETBs sorted by count

Card	Decks	Triggered By	Type
Channeler Initiate	1	Self	Creature
Pestermite	1	Self	Creature
Bloodghast	1	Other	Creature
Craterhoof Behemoth	1	Self	Creature
Cloudstone Curio	1	Other	Artifact
Thought-Knot Seer	1	Self	Creature
Goblin Matron	1	Self	Creature
Sylvan Ranger	1	Self	Creature
Anafenza, Kin-Tree Spirit	1	Other	Creature
Fiend Hunter	1	Self	Creature
Bruse Tarl, Boorish Herder	1	Self	Creature
Hammer of Nazahn	1	Either-Or	Artifact
Godo, Bandit Warlord	1	Self	Creature
Altar of the Brood	1	Other	Artifact
Spellstutter Sprite	1	Self	Creature
Spine of Ish Sah	1	Self	Artifact
Goblin Bushwhacker	1	Self	Creature
Faerie Miscreant	1	Self	Creature
Dualcaster Mage	1	Self	Creature
Mogis's Marauder	1	Self	Creature
Jeleva, Nephalaia's Scourge	1	Self	Creature
Fierce Empath	1	Self	Creature
Trinket Mage	1	Self	Creature
Bond Beetle	1	Self	Creature
Wingcrafter	1	Either-Or	Creature
Kederekt Leviathan	1	Self	Creature
Peregrine Drake	1	Self	Creature
Elvish Visionary	1	Self	Creature
Murderous Redcap	1	Self	Creature
Intruder Alarm	1	Other	Enchantment

Table 25: Triggered abilities sorted by count

Card	Decks	Type
Mystic Remora	42	Enchantment
Carpet of Flowers	40	Enchantment
Sylvan Library	37	Enchantment
Dark Confidant	36	Creature
Necropotence	23	Enchantment
Tymna the Weaver	18	Creature
Wild Growth	16	Enchantment
Paradox Engine	15	Artifact
Utopia Sprawl	14	Enchantment
Rhystic Study	12	Enchantment
Protean Hulk	12	Creature

Table 25: Triggered abilities sorted by count

Card	Decks	Type
Baral, Chief of Compliance	9	Creature
Aetherflux Reservoir	8	Artifact
Narcomoeba	7	Creature
Runic Armasaur	6	Creature
Blood Artist	5	Creature
Consecrated Sphinx	5	Creature
Jin-Gitaxias, Core Augur	5	Creature
Skullclamp	5	Artifact
Cephalid Illusionist	5	Creature
Rings of Brightearth	4	Artifact
Vial Smasher the Fierce	4	Creature
Mindblade Render	4	Creature
Inventors' Fair	4	Land
Pattern of Rebirth	4	Enchantment
Smothering Tithe	3	Enchantment
Eternal Scourge	3	Creature
Mirri's Guile	3	Enchantment
Compost	3	Enchantment
Zur the Enchanter	3	Creature
Shield Sphere	3	Artifact Creature
Nihil Spellbomb	3	Artifact
Tana, the Bloodsower	3	Creature
Zulaport Cutthroat	3	Creature
Druids' Repository	2	Enchantment
Yidris, Maelstrom Wielder	2	Creature
Najeela, the Blade-Blossom	2	Creature
Academy Rector	2	Creature
Keen Sense	2	Enchantment
Nature's Will	2	Enchantment
Grim Flayer	2	Creature
Kozilek's Return	2	Instant
Curiosity	2	Enchantment
Golgari Thug	2	Creature
Glimpse of Nature	2	Sorcery
Tangle Wire	2	Artifact
Myr Moonvessel	2	Artifact Creature
Counterbalance	2	Enchantment
Edric, Spymaster of Trest	2	Creature
Anafenza, the Foremost	2	Creature
Kraum, Ludevic's Opus	2	Creature
Waste Not	2	Enchantment
Mikaeus, the Unhallowed	2	Creature
Azra Oddsmaker	2	Creature
Kozilek, Butcher of Truth	2	Creature
Sidisi, Undead Vizier	2	Creature

Table 25: Triggered abilities sorted by count

Card	Decks	Type
Nezahal, Primal Tide	1	Creature
Myr Retriever	1	Artifact Creature
Tishana, Voice of Thunder	1	Creature
Luminarch Ascension	1	Enchantment
Argentum Armor	1	Artifact
Rashmi, Eternities Crafter	1	Creature
Mindslicer	1	Creature
Possibility Storm	1	Enchantment
Goblin Sharpshooter	1	Creature
Momir Vig, Simic Visionary	1	Creature
The Chain Veil	1	Artifact
Ikra Shidiqi, the Usurper	1	Creature
Meren of Clan Nel Toth	1	Creature
Search for Azcanta	1	Enchantment
Tendershoot Dryad	1	Creature
Gaea's Blessing	1	Sorcery
Nightveil Sprite	1	Creature
Duskwatch Recruiter	1	Creature
Thousand-Year Storm	1	Enchantment
Junk Diver	1	Artifact Creature
Contamination	1	Enchantment
Thing in the Ice	1	Creature
Chalice of the Void	1	Artifact
Slithermuse	1	Creature
Animar, Soul of Elements	1	Creature
Niv-Mizzet, Dracogenius	1	Creature
Nettle Sentinel	1	Creature
Burgeoning	1	Enchantment
Genesis Hydra	1	Creature
Oppression	1	Enchantment
Phyrexian Devourer	1	Artifact Creature
Xantid Swarm	1	Creature
Flagstones of Trokair	1	Land
Disciple of the Vault	1	Creature
The Ur-Dragon	1	Creature
Chromatic Star	1	Artifact
Blisterpod	1	Creature
Prossh, Skyraider of Kher	1	Creature
The Gitrog Monster	1	Creature
Hangarback Walker	1	Artifact Creature
Looter il-Kor	1	Creature
Stasis	1	Enchantment
Sidisi's Faithful	1	Creature
Beast Whisperer	1	Creature
Smothering Abomination	1	Creature

Table 25: Triggered abilities sorted by count

Card	Decks	Type
Helm of the Host	1	Artifact
Scrap Trawler	1	Artifact Creature
Dragon Mage	1	Creature
Sygg, River Cutthroat	1	Creature
Verity Circle	1	Enchantment
Hokori, Dust Drinker	1	Creature
Sire of Insanity	1	Creature

A.7 Tables for Section 2.7: Activated Abilities

Table 26: Activated abilities sorted by count

Card	Decks	Type	Mana	Non-mana
Mana Crypt	59	Artifact	True	False
Sol Ring	58	Artifact	True	False
Mox Diamond	57	Artifact	True	False
Chrome Mox	57	Artifact	True	False
Misty Rainforest	54	Land	False	True
Polluted Delta	53	Land	False	True
Verdant Catacombs	51	Land	False	True
Flooded Strand	50	Land	False	True
Scalding Tarn	47	Land	False	True
Windswept Heath	47	Land	False	True
Bloodstained Mire	46	Land	False	True
Wooded Foothills	46	Land	False	True
Marsh Flats	46	Land	False	True
Mana Vault	39	Artifact	True	False
Birds of Paradise	37	Creature	True	False
Lotus Petal	35	Artifact	True	False
Arid Mesa	31	Land	False	True
Arbor Elf	31	Creature	False	True
Deathrite Shaman	31	Creature	True	True
Fyndhorn Elves	30	Creature	True	False
Fellwar Stone	30	Artifact	True	False
Sensei's Divining Top	30	Artifact	False	True
Llanowar Elves	29	Creature	True	False
Grim Monolith	29	Artifact	True	True
Elvish Mystic	27	Creature	True	False
Elves of Deep Shadow	24	Creature	True	False
Necropotence	23	Enchantment	False	True
Lion's Eye Diamond	22	Artifact	True	False
Talisman of Dominance	21	Artifact	True	False
Isochron Scepter	19	Artifact	False	True
Survival of the Fittest	18	Enchantment	False	True
Avacyn's Pilgrim	18	Creature	True	False

Table 26: Activated abilities sorted by count

Card	Decks	Type	Mana	Non-mana
Dimir Signet	17	Artifact	True	False
Priest of Titania	15	Creature	True	False
Noble Hierarch	15	Creature	True	False
Boreal Druid	13	Creature	True	False
Thrasios, Triton Hero	13	Creature	False	True
Bloom Tender	12	Creature	True	False
Jace, Vryn's Prodigy	11	Creature	False	True
Talisman of Progress	9	Artifact	True	False
Elvish Spirit Guide	9	Creature	True	False
Razaketh, the Foulblooded	9	Creature	False	True
Aetherflux Reservoir	8	Artifact	False	True
Izzet Signet	8	Artifact	True	False
Caustic Caterpillar	8	Creature	False	True
Auriok Salvagers	8	Creature	False	True
Sylvan Safekeeper	7	Creature	False	True
Simic Signet	7	Artifact	True	False
Walking Ballista	7	Artifact Creature	False	True
Hope of Ghirapur	6	Artifact Creature	False	True
Wall of Roots	6	Creature	True	False
Viscera Seer	6	Creature	False	True
Hermit Druid	6	Creature	False	True
Strip Mine	6	Land	True	True
Talisman of Indulgence	6	Artifact	True	False
Quirion Ranger	5	Creature	False	True
Prismatic Lens	5	Artifact	True	False
Apprentice Necromancer	5	Creature	False	True
Basalt Monolith	5	Artifact	True	True
Voltaic Key	5	Artifact	False	True
Yisan, the Wanderer Bard	5	Creature	False	True
Mox Amber	5	Artifact	True	False
Nomads en-Kor	5	Creature	False	True
Cephalid Illusionist	5	Creature	False	True
Mind Stone	4	Artifact	True	True
Azorius Signet	4	Artifact	True	False
Everflowing Chalice	4	Artifact	True	False
Thought Vessel	4	Artifact	True	False
Inventors' Fair	4	Land	True	True
Fatestitcher	4	Creature	False	True
Scroll Rack	4	Artifact	False	True
Birthing Pod	4	Artifact	False	True
Food Chain	4	Enchantment	True	False
Horizon Canopy	4	Land	True	True
Dack Fayden	4	Planeswalker	False	True
Simian Spirit Guide	4	Creature	True	False
Buried Ruin	3	Land	True	True

Table 26: Activated abilities sorted by count

Card	Decks	Type	Mana	Non-mana
Vexing Shusher	3	Creature	False	True
Devoted Druid	3	Creature	True	True
Temur Sabertooth	3	Creature	False	True
Wirewood Symbiote	3	Creature	False	True
Blood Pet	3	Creature	True	False
Children of Korlis	3	Creature	False	True
Freed from the Real	3	Enchantment	False	True
Kiki-Jiki, Mirror Breaker	3	Creature	False	True
Scavenging Ooze	3	Creature	False	True
Carrión Feeder	3	Creature	False	True
Nihil Spellbomb	3	Artifact	False	True
Bazaar of Baghdad	3	Land	False	True
Orcish Lumberjack	3	Creature	True	False
Pernicious Deed	3	Enchantment	False	True
Staff of Domination	3	Artifact	False	True
Aura of Silence	3	Enchantment	False	True
Druuids' Repository	2	Enchantment	True	False
Memory Jar	2	Artifact	False	True
Altar of Dementia	2	Artifact	False	True
Na jeela, the Blade-Blossom	2	Creature	False	True
Spellsrite	2	Artifact Creature	False	True
Siren Stormtamer	2	Creature	False	True
Mouth of Ronom	2	Land	True	True
Candelabra of Tawnos	2	Artifact	False	True
Academy Ruins	2	Land	True	True
Earthcraft	2	Enchantment	False	True
Golgari Signet	2	Artifact	True	False
Dross Hopper	2	Creature	False	True
Skirge Familiar	2	Creature	True	False
Metalworker	2	Artifact Creature	True	False
Springleaf Drum	2	Artifact	True	False
Overeager Apprentice	2	Creature	True	False
Fractured Powerstone	2	Artifact	True	True
Derevi, Empyrial Tactician	2	Creature	False	True
Serum Powder	2	Artifact	True	False
Ugin, the Spirit Dragon	2	Planeswalker	False	True
Squandered Resources	2	Enchantment	True	False
Aether Spellbomb	2	Artifact	False	True
Tasigur, the Golden Fang	2	Creature	False	True
General Tazri	2	Creature	False	True
Shaman en-Kor	2	Creature	False	True
Lotus Bloom	2	Artifact	True	False
Rakdos Signet	2	Artifact	True	False
Codex Shredder	2	Artifact	False	True
Selvala, Heart of the Wilds	2	Creature	True	False

Table 26: Activated abilities sorted by count

Card	Decks	Type	Mana	Non-mana
Wild Cantor	2	Creature	True	False
Orzhov Signet	2	Artifact	True	False
Yavimaya Hollow	2	Land	True	True
Breya, Etherium Shaper	2	Artifact Creature	False	True
Thousand-Year Elixir	2	Artifact	False	True
Bloodthrone Vampire	2	Creature	False	True
Jeweled Amulet	2	Artifact	True	True
Goblin Bombardment	2	Enchantment	False	True
Expedition Map	2	Artifact	False	True
Scryb Ranger	2	Creature	False	True
Warrior en-Kor	2	Creature	False	True
Thran Dynamo	2	Artifact	True	False
Fauna Shaman	2	Creature	False	True
Mausoleum Wanderer	1	Creature	False	True
Mistveil Plains	1	Land	False	True
Saffi Eriksdotter	1	Creature	False	True
Captain Sisay	1	Creature	False	True
Purphoros, God of the Forge	1	Enchantment Creature	False	True
Sequestered Stash	1	Land	True	True
Citanul Flute	1	Artifact	False	True
Luminarch Ascension	1	Enchantment	False	True
Somberwald Sage	1	Creature	True	False
Torch Courier	1	Creature	False	True
Rishadan Port	1	Land	True	True
Goblin Sharpshooter	1	Creature	False	True
The Chain Veil	1	Artifact	False	True
Krark-Clan Ironworks	1	Artifact	True	False
Noose Constrictor	1	Creature	False	True
Treasonous Ogre	1	Creature	True	False
Welding Jar	1	Artifact	False	True
Petrified Field	1	Land	True	True
Qasali Pridemage	1	Creature	False	True
Greater Good	1	Enchantment	False	True
Varolz, the Scar-Striped	1	Creature	False	True
Insolent Neonate	1	Creature	False	True
Hedron Crawler	1	Artifact Creature	True	False
Wirewood Lodge	1	Land	True	True
Bow of Nylea	1	Enchantment Artifact	False	True
Karametra's Acolyte	1	Creature	False	True
Homeward Path	1	Land	True	True
Beastcaller Savant	1	Creature	True	False
Chromatic Star	1	Artifact	True	False
Sky Diamond	1	Artifact	True	False
Cephalid Inkshrouder	1	Creature	False	True
Leaden Myr	1	Artifact Creature	True	False

Table 26: Activated abilities sorted by count

Card	Decks	Type	Mana	Non-mana
Daretti, Scrap Savant	1	Planeswalker	False	True
Weathered Wayfarer	1	Creature	False	True
Palinchron	1	Creature	False	True
Honor-Worn Shaku	1	Artifact	True	True
Morselhoarder	1	Creature	True	False
Golgari Grave-Troll	1	Creature	False	True
Sliver Queen	1	Creature	False	True
Scion of the Ur-Dragon	1	Creature	False	True
Voyaging Satyr	1	Creature	False	True
Plague Myr	1	Artifact Creature	True	False
Kiora's Follower	1	Creature	False	True
Whirlpool Warrior	1	Creature	False	True
Garruk, Primal Hunter	1	Planeswalker	False	True
Heart Warden	1	Creature	True	True
Nezahal, Primal Tide	1	Creature	False	True
Joraga Treespeaker	1	Creature	True	False
Mishra's Bauble	1	Artifact	False	True
Pendelhaven	1	Land	True	True
Urza's Bauble	1	Artifact	False	True
Goblin Welder	1	Creature	False	True
Krosan Wayfarer	1	Creature	False	True
Duskwatch Recruiter	1	Creature	False	True
Arcbound Ravager	1	Artifact Creature	False	True
Birchlore Rangers	1	Creature	True	False
Channeler Initiate	1	Creature	True	False
Sakura-Tribe Scout	1	Creature	False	True
Talisman of Impulse	1	Artifact	True	False
Chromatic Sphere	1	Artifact	True	False
Worn Powerstone	1	Artifact	True	False
Okina, Temple to the Grandfathers	1	Land	True	True
Tinder Wall	1	Creature	True	True
Command Beacon	1	Land	True	True
Mother of Runes	1	Creature	False	True
Brass Squire	1	Artifact Creature	False	True
Arcum Dagsson	1	Creature	False	True
Minamo, School at Water's Edge	1	Land	True	True
Reassembling Skeleton	1	Creature	False	True
Niv-Mizzet, Dracogenius	1	Creature	False	True
High Market	1	Land	True	True
Phyrexian Devourer	1	Artifact Creature	False	True
Wayfarer's Bauble	1	Artifact	False	True
Ulvenwald Tracker	1	Creature	False	True
Palladium Myr	1	Artifact Creature	True	False
Gilded Lotus	1	Artifact	True	False
Blinkmoth Nexus	1	Land	True	True

Table 26: Activated abilities sorted by count

Card	Decks	Type	Mana	Non-mana
Skirk Prospector	1	Creature	True	False
Hapless Researcher	1	Creature	False	True
Gorilla Shaman	1	Creature	False	True
Eiganjo Castle	1	Land	True	True
Guardian Idol	1	Artifact	True	True
Prossh, Skyraider of Kher	1	Creature	False	True
Blighted Bat	1	Creature	False	True
Kamahl, Fist of Krosa	1	Creature	False	True
Silver Myr	1	Artifact Creature	True	False
Hangarback Walker	1	Artifact Creature	False	True
Conjurer's Bauble	1	Artifact	False	True
Silent Gravestone	1	Artifact	False	True
Manakin	1	Artifact Creature	True	False
Heritage Druid	1	Creature	True	False
Astral Cornucopia	1	Artifact	True	False
Putrid Imp	1	Creature	False	True
Spawning Pit	1	Artifact	False	True
Teferi, Temporal Archmage	1	Planeswalker	False	True
Need for Speed	1	Enchantment	False	True
Mishra's Factory	1	Land	True	True
Tezzeret the Seeker	1	Planeswalker	False	True
Inkmoth Nexus	1	Land	True	True
Scavenger Grounds	1	Land	True	True
Verity Circle	1	Enchantment	False	True

Table 27: Nonland activated abilities sorted by count

Card	Decks	Type	Mana	Non-mana
Mana Crypt	59	Artifact	True	False
Sol Ring	58	Artifact	True	False
Mox Diamond	57	Artifact	True	False
Chrome Mox	57	Artifact	True	False
Mana Vault	39	Artifact	True	False
Birds of Paradise	37	Creature	True	False
Lotus Petal	35	Artifact	True	False
Arbor Elf	31	Creature	False	True
Deathrite Shaman	31	Creature	True	True
Fyndhorn Elves	30	Creature	True	False
Fellwar Stone	30	Artifact	True	False
Sensei's Divining Top	30	Artifact	False	True
Llanowar Elves	29	Creature	True	False
Grim Monolith	29	Artifact	True	True
Elvish Mystic	27	Creature	True	False
Elves of Deep Shadow	24	Creature	True	False
Necropotence	23	Enchantment	False	True

Table 27: Nonland activated abilities sorted by count

Card	Decks	Type	Mana	Non-mana
Lion's Eye Diamond	22	Artifact	True	False
Talisman of Dominance	21	Artifact	True	False
Isochron Scepter	19	Artifact	False	True
Survival of the Fittest	18	Enchantment	False	True
Avacyn's Pilgrim	18	Creature	True	False
Dimir Signet	17	Artifact	True	False
Priest of Titania	15	Creature	True	False
Noble Hierarch	15	Creature	True	False
Boreal Druid	13	Creature	True	False
Thrasiros, Triton Hero	13	Creature	False	True
Bloom Tender	12	Creature	True	False
Jace, Vryn's Prodigy	11	Creature	False	True
Talisman of Progress	9	Artifact	True	False
Elvish Spirit Guide	9	Creature	True	False
Razaketh, the Foulblooded	9	Creature	False	True
Aetherflux Reservoir	8	Artifact	False	True
Izzet Signet	8	Artifact	True	False
Caustic Caterpillar	8	Creature	False	True
Auriok Salvagers	8	Creature	False	True
Sylvan Safekeeper	7	Creature	False	True
Simic Signet	7	Artifact	True	False
Walking Ballista	7	Artifact Creature	False	True
Hope of Ghirapur	6	Artifact Creature	False	True
Wall of Roots	6	Creature	True	False
Viscera Seer	6	Creature	False	True
Hermit Druid	6	Creature	False	True
Talisman of Indulgence	6	Artifact	True	False
Quirion Ranger	5	Creature	False	True
Prismatic Lens	5	Artifact	True	False
Apprentice Necromancer	5	Creature	False	True
Basalt Monolith	5	Artifact	True	True
Voltaic Key	5	Artifact	False	True
Yisan, the Wanderer Bard	5	Creature	False	True
Mox Amber	5	Artifact	True	False
Nomads en-Kor	5	Creature	False	True
Cephalid Illusionist	5	Creature	False	True
Mind Stone	4	Artifact	True	True
Azorius Signet	4	Artifact	True	False
Everflowing Chalice	4	Artifact	True	False
Thought Vessel	4	Artifact	True	False
Fatestitcher	4	Creature	False	True
Scroll Rack	4	Artifact	False	True
Birth Pod	4	Artifact	False	True
Food Chain	4	Enchantment	True	False
Dack Fayden	4	Planeswalker	False	True

Table 27: Nonland activated abilities sorted by count

Card	Decks	Type	Mana	Non-mana
Simian Spirit Guide	4	Creature	True	False
Vexing Shusher	3	Creature	False	True
Devoted Druid	3	Creature	True	True
Temur Sabertooth	3	Creature	False	True
Wirewood Symbiote	3	Creature	False	True
Blood Pet	3	Creature	True	False
Children of Korlis	3	Creature	False	True
Freed from the Real	3	Enchantment	False	True
Kiki-Jiki, Mirror Breaker	3	Creature	False	True
Scavenging Ooze	3	Creature	False	True
Carriion Feeder	3	Creature	False	True
Nihil Spellbomb	3	Artifact	False	True
Orcish Lumberjack	3	Creature	True	False
Pernicious Deed	3	Enchantment	False	True
Staff of Domination	3	Artifact	False	True
Aura of Silence	3	Enchantment	False	True
Druids' Repository	2	Enchantment	True	False
Memory Jar	2	Artifact	False	True
Altar of Dementia	2	Artifact	False	True
Najela, the Blade-Blossom	2	Creature	False	True
Spellsrite	2	Artifact Creature	False	True
Siren Stormtamer	2	Creature	False	True
Candelabra of Tawnos	2	Artifact	False	True
Earthcraft	2	Enchantment	False	True
Golgari Signet	2	Artifact	True	False
Dross Hopper	2	Creature	False	True
Skirge Familiar	2	Creature	True	False
Metalworker	2	Artifact Creature	True	False
Springleaf Drum	2	Artifact	True	False
Overeager Apprentice	2	Creature	True	False
Fractured Powerstone	2	Artifact	True	True
Derevi, Empyrial Tactician	2	Creature	False	True
Serum Powder	2	Artifact	True	False
Ugin, the Spirit Dragon	2	Planeswalker	False	True
Squandered Resources	2	Enchantment	True	False
Aether Spellbomb	2	Artifact	False	True
Tasigur, the Golden Fang	2	Creature	False	True
General Tazri	2	Creature	False	True
Shaman en-Kor	2	Creature	False	True
Lotus Bloom	2	Artifact	True	False
Rakdos Signet	2	Artifact	True	False
Codex Shredder	2	Artifact	False	True
Selvala, Heart of the Wilds	2	Creature	True	False
Wild Cantor	2	Creature	True	False
Orzhov Signet	2	Artifact	True	False

Table 27: Nonland activated abilities sorted by count

Card	Decks	Type	Mana	Non-mana
Breya, Etherium Shaper	2	Artifact Creature	False	True
Thousand-Year Elixir	2	Artifact	False	True
Bloodthrone Vampire	2	Creature	False	True
Jeweled Amulet	2	Artifact	True	True
Goblin Bombardment	2	Enchantment	False	True
Expedition Map	2	Artifact	False	True
Scryb Ranger	2	Creature	False	True
Warrior en-Kor	2	Creature	False	True
Thran Dynamo	2	Artifact	True	False
Fauna Shaman	2	Creature	False	True
Mausoleum Wanderer	1	Creature	False	True
Saffi Eriksdotter	1	Creature	False	True
Captain Sisay	1	Creature	False	True
Purphoros, God of the Forge	1	Enchantment Creature	False	True
Citanul Flute	1	Artifact	False	True
Luminarch Ascension	1	Enchantment	False	True
Somberwald Sage	1	Creature	True	False
Torch Courier	1	Creature	False	True
Goblin Sharpshooter	1	Creature	False	True
The Chain Veil	1	Artifact	False	True
Krark-Clan Ironworks	1	Artifact	True	False
Noose Constrictor	1	Creature	False	True
Treasonous Ogre	1	Creature	True	False
Welding Jar	1	Artifact	False	True
Qasali Pridemage	1	Creature	False	True
Greater Good	1	Enchantment	False	True
Varolz, the Scar-Striped	1	Creature	False	True
Insolent Neonate	1	Creature	False	True
Hedron Crawler	1	Artifact Creature	True	False
Bow of Nylea	1	Enchantment Artifact	False	True
Karametra's Acolyte	1	Creature	False	True
Beastcaller Savant	1	Creature	True	False
Chromatic Star	1	Artifact	True	False
Sky Diamond	1	Artifact	True	False
Cephalid Inkshrouder	1	Creature	False	True
Leaden Myr	1	Artifact Creature	True	False
Daretti, Scrap Savant	1	Planeswalker	False	True
Weathered Wayfarer	1	Creature	False	True
Palinchron	1	Creature	False	True
Honor-Worn Shaku	1	Artifact	True	True
Morselhoarder	1	Creature	True	False
Golgari Grave-Troll	1	Creature	False	True
Sliver Queen	1	Creature	False	True
Scion of the Ur-Dragon	1	Creature	False	True
Voyaging Satyr	1	Creature	False	True

Table 27: Nonland activated abilities sorted by count

Card	Decks	Type	Mana	Non-mana
Plague Myr	1	Artifact Creature	True	False
Kiora's Follower	1	Creature	False	True
Whirlpool Warrior	1	Creature	False	True
Garruk, Primal Hunter	1	Planeswalker	False	True
Heart Warden	1	Creature	True	True
Nezahal, Primal Tide	1	Creature	False	True
Joraga Treespeaker	1	Creature	True	False
Mishra's Bauble	1	Artifact	False	True
Urza's Bauble	1	Artifact	False	True
Goblin Welder	1	Creature	False	True
Krosan Wayfarer	1	Creature	False	True
Duskwatch Recruiter	1	Creature	False	True
Arclight Ravager	1	Artifact Creature	False	True
Birchlore Rangers	1	Creature	True	False
Channeler Initiate	1	Creature	True	False
Sakura-Tribe Scout	1	Creature	False	True
Talisman of Impulse	1	Artifact	True	False
Chromatic Sphere	1	Artifact	True	False
Worn Powerstone	1	Artifact	True	False
Tinder Wall	1	Creature	True	True
Mother of Runes	1	Creature	False	True
Brass Squire	1	Artifact Creature	False	True
Arcum Dagsson	1	Creature	False	True
Reassembling Skeleton	1	Creature	False	True
Niv-Mizzet, Dracogenius	1	Creature	False	True
Phyrexian Devourer	1	Artifact Creature	False	True
Wayfarer's Bauble	1	Artifact	False	True
Ulvenwald Tracker	1	Creature	False	True
Palladium Myr	1	Artifact Creature	True	False
Gilded Lotus	1	Artifact	True	False
Skirk Prospector	1	Creature	True	False
Hapless Researcher	1	Creature	False	True
Gorilla Shaman	1	Creature	False	True
Guardian Idol	1	Artifact	True	True
Prossh, Skyraider of Kher	1	Creature	False	True
Blighted Bat	1	Creature	False	True
Kamahl, Fist of Krosa	1	Creature	False	True
Silver Myr	1	Artifact Creature	True	False
Hangarback Walker	1	Artifact Creature	False	True
Conjurer's Bauble	1	Artifact	False	True
Silent Gravestone	1	Artifact	False	True
Manakin	1	Artifact Creature	True	False
Heritage Druid	1	Creature	True	False
Astral Cornucopia	1	Artifact	True	False
Putrid Imp	1	Creature	False	True

Table 27: Nonland activated abilities sorted by count

Card	Decks	Type	Mana	Non-mana
Spawning Pit	1	Artifact	False	True
Teferi, Temporal Archmage	1	Planeswalker	False	True
Need for Speed	1	Enchantment	False	True
Tezzeret the Seeker	1	Planeswalker	False	True
Verity Circle	1	Enchantment	False	True

Table 28: Mana activated abilities sorted by count

Card	Decks	Type
Mana Crypt	59	Artifact
Sol Ring	58	Artifact
Mox Diamond	57	Artifact
Chrome Mox	57	Artifact
Mana Vault	39	Artifact
Birds of Paradise	37	Creature
Lotus Petal	35	Artifact
Deathrite Shaman	31	Creature
Fyndhorn Elves	30	Creature
Fellwar Stone	30	Artifact
Llanowar Elves	29	Creature
Grim Monolith	29	Artifact
Elvish Mystic	27	Creature
Elves of Deep Shadow	24	Creature
Lion's Eye Diamond	22	Artifact
Talisman of Dominance	21	Artifact
Avacyn's Pilgrim	18	Creature
Dimir Signet	17	Artifact
Priest of Titania	15	Creature
Noble Hierarch	15	Creature
Boreal Druid	13	Creature
Bloom Tender	12	Creature
Talisman of Progress	9	Artifact
Elvish Spirit Guide	9	Creature
Izzet Signet	8	Artifact
Simic Signet	7	Artifact
Wall of Roots	6	Creature
Strip Mine	6	Land
Talisman of Indulgence	6	Artifact
Prismatic Lens	5	Artifact
Basalt Monolith	5	Artifact
Mox Amber	5	Artifact
Mind Stone	4	Artifact
Azorius Signet	4	Artifact
Everflowing Chalice	4	Artifact
Thought Vessel	4	Artifact

Table 28: Mana activated abilities sorted by count

Card	Decks	Type
Inventors' Fair	4	Land
Food Chain	4	Enchantment
Horizon Canopy	4	Land
Simian Spirit Guide	4	Creature
Buried Ruin	3	Land
Devoted Druid	3	Creature
Blood Pet	3	Creature
Orcish Lumberjack	3	Creature
Druids' Repository	2	Enchantment
Mouth of Ronom	2	Land
Academy Ruins	2	Land
Golgari Signet	2	Artifact
Skirge Familiar	2	Creature
Metalworker	2	Artifact Creature
Springleaf Drum	2	Artifact
Overeager Apprentice	2	Creature
Fractured Powerstone	2	Artifact
Serum Powder	2	Artifact
Squandered Resources	2	Enchantment
Lotus Bloom	2	Artifact
Rakdos Signet	2	Artifact
Selvala, Heart of the Wilds	2	Creature
Wild Cantor	2	Creature
Orzhov Signet	2	Artifact
Yavimaya Hollow	2	Land
Jeweled Amulet	2	Artifact
Thran Dynamo	2	Artifact
Sequestered Stash	1	Land
Somberwald Sage	1	Creature
Rishadan Port	1	Land
Krark-Clan Ironworks	1	Artifact
Treasonous Ogre	1	Creature
Petrified Field	1	Land
Hedron Crawler	1	Artifact Creature
Wirewood Lodge	1	Land
Homeward Path	1	Land
Beastcaller Savant	1	Creature
Chromatic Star	1	Artifact
Sky Diamond	1	Artifact
Leaden Myr	1	Artifact Creature
Honor-Worn Shaku	1	Artifact
Morselhoarder	1	Creature
Plague Myr	1	Artifact Creature
Heart Warden	1	Creature
Joraga Treespeaker	1	Creature

Table 28: Mana activated abilities sorted by count

Card	Decks	Type
Pendelhaven	1	Land
Birchlore Rangers	1	Creature
Channeler Initiate	1	Creature
Talisman of Impulse	1	Artifact
Chromatic Sphere	1	Artifact
Worn Powerstone	1	Artifact
Okin, Temple to the Grandfathers	1	Land
Tinder Wall	1	Creature
Command Beacon	1	Land
Minamo, School at Water's Edge	1	Land
High Market	1	Land
Palladium Myr	1	Artifact Creature
Gilded Lotus	1	Artifact
Blinkmoth Nexus	1	Land
Skirk Prospector	1	Creature
Eiganjo Castle	1	Land
Guardian Idol	1	Artifact
Silver Myr	1	Artifact Creature
Manakin	1	Artifact Creature
Heritage Druid	1	Creature
Astral Cornucopia	1	Artifact
Mishra's Factory	1	Land
Inkmoth Nexus	1	Land
Scavenger Grounds	1	Land

Table 29: Non-mana activated abilities sorted by count

Card	Decks	Type
Misty Rainforest	54	Land
Polluted Delta	53	Land
Verdant Catacombs	51	Land
Flooded Strand	50	Land
Scalding Tarn	47	Land
Windswept Heath	47	Land
Bloodstained Mire	46	Land
Wooded Foothills	46	Land
Marsh Flats	46	Land
Arid Mesa	31	Land
Arbor Elf	31	Creature
Deathrite Shaman	31	Creature
Sensei's Divining Top	30	Artifact
Grim Monolith	29	Artifact
Necropotence	23	Enchantment
Isochron Scepter	19	Artifact
Survival of the Fittest	18	Enchantment

Table 29: Non-mana activated abilities sorted by count

Card	Decks	Type
Thrasios, Triton Hero	13	Creature
Jace, Vryn's Prodigy	11	Creature
Razaketh, the Foulblooded	9	Creature
Aetherflux Reservoir	8	Artifact
Caustic Caterpillar	8	Creature
Auriok Salvagers	8	Creature
Sylvan Safekeeper	7	Creature
Walking Ballista	7	Artifact Creature
Hope of Ghirapur	6	Artifact Creature
Viscera Seer	6	Creature
Hermit Druid	6	Creature
Strip Mine	6	Land
Quirion Ranger	5	Creature
Apprentice Necromancer	5	Creature
Basalt Monolith	5	Artifact
Voltaic Key	5	Artifact
Yisan, the Wanderer Bard	5	Creature
Nomads en-Kor	5	Creature
Cephalid Illusionist	5	Creature
Mind Stone	4	Artifact
Inventors' Fair	4	Land
Fatestitcher	4	Creature
Scroll Rack	4	Artifact
Birthing Pod	4	Artifact
Horizon Canopy	4	Land
Dack Fayden	4	Planeswalker
Buried Ruin	3	Land
Vexing Shusher	3	Creature
Devoted Druid	3	Creature
Temur Sabertooth	3	Creature
Wirewood Symbiote	3	Creature
Children of Korlis	3	Creature
Freed from the Real	3	Enchantment
Kiki-Jiki, Mirror Breaker	3	Creature
Scavenging Ooze	3	Creature
Carrion Feeder	3	Creature
Nihil Spellbomb	3	Artifact
Bazaar of Baghdad	3	Land
Pernicious Deed	3	Enchantment
Staff of Domination	3	Artifact
Aura of Silence	3	Enchantment
Memory Jar	2	Artifact
Altar of Dementia	2	Artifact
Najeela, the Blade-Blossom	2	Creature
Spellskite	2	Artifact Creature

Table 29: Non-mana activated abilities sorted by count

Card	Decks	Type
Siren Stormtamer	2	Creature
Mouth of Ronom	2	Land
Candelabra of Tawnos	2	Artifact
Academy Ruins	2	Land
Earthcraft	2	Enchantment
Dross Hopper	2	Creature
Fractured Powerstone	2	Artifact
Derevi, Empyrial Tactician	2	Creature
Ugin, the Spirit Dragon	2	Planeswalker
Aether Spellbomb	2	Artifact
Tasigur, the Golden Fang	2	Creature
General Tazri	2	Creature
Shaman en-Kor	2	Creature
Codex Shredder	2	Artifact
Yavimaya Hollow	2	Land
Breya, Etherium Shaper	2	Artifact Creature
Thousand-Year Elixir	2	Artifact
Bloodthrone Vampire	2	Creature
Jeweled Amulet	2	Artifact
Goblin Bombardment	2	Enchantment
Expedition Map	2	Artifact
Scryb Ranger	2	Creature
Warrior en-Kor	2	Creature
Fauna Shaman	2	Creature
Mausoleum Wanderer	1	Creature
Mistveil Plains	1	Land
Saffi Eriksdotter	1	Creature
Captain Sisay	1	Creature
Purphoros, God of the Forge	1	Enchantment Creature
Sequestered Stash	1	Land
Citanul Flute	1	Artifact
Luminarch Ascension	1	Enchantment
Torch Courier	1	Creature
Rishadan Port	1	Land
Goblin Sharpshooter	1	Creature
The Chain Veil	1	Artifact
Noose Constrictor	1	Creature
Welding Jar	1	Artifact
Petrified Field	1	Land
Qasali Pridemage	1	Creature
Greater Good	1	Enchantment
Varolz, the Scar-Striped	1	Creature
Insolent Neonate	1	Creature
Wirewood Lodge	1	Land
Bow of Nylea	1	Enchantment Artifact

Table 29: Non-mana activated abilities sorted by count

Card	Decks	Type
Karametra's Acolyte	1	Creature
Homeward Path	1	Land
Cephalid Inkshrouder	1	Creature
Daretti, Scrap Savant	1	Planeswalker
Weathered Wayfarer	1	Creature
Palinchron	1	Creature
Honor-Worn Shaku	1	Artifact
Golgari Grave-Troll	1	Creature
Sliver Queen	1	Creature
Scion of the Ur-Dragon	1	Creature
Voyaging Satyr	1	Creature
Kiora's Follower	1	Creature
Whirlpool Warrior	1	Creature
Garruk, Primal Hunter	1	Planeswalker
Heart Warden	1	Creature
Nezahal, Primal Tide	1	Creature
Mishra's Bauble	1	Artifact
Pendelhaven	1	Land
Urza's Bauble	1	Artifact
Goblin Welder	1	Creature
Krosan Wayfarer	1	Creature
Duskwatch Recruiter	1	Creature
Arcbound Ravager	1	Artifact Creature
Sakura-Tribe Scout	1	Creature
Okinna, Temple to the Grandfathers	1	Land
Tinder Wall	1	Creature
Command Beacon	1	Land
Mother of Runes	1	Creature
Brass Squire	1	Artifact Creature
Arcum Dagsson	1	Creature
Minamo, School at Water's Edge	1	Land
Reassembling Skeleton	1	Creature
Niv-Mizzet, Dracogenius	1	Creature
High Market	1	Land
Phyrexian Devourer	1	Artifact Creature
Wayfarer's Bauble	1	Artifact
Ulvenwald Tracker	1	Creature
Blinkmoth Nexus	1	Land
Hapless Researcher	1	Creature
Gorilla Shaman	1	Creature
Eiganjo Castle	1	Land
Guardian Idol	1	Artifact
Prossh, Skyraider of Kher	1	Creature
Blighted Bat	1	Creature
Kamahl, Fist of Krosa	1	Creature

Table 29: Non-mana activated abilities sorted by count

Card	Decks	Type
Hangarback Walker	1	Artifact Creature
Conjurer's Bauble	1	Artifact
Silent Gravestone	1	Artifact
Putrid Imp	1	Creature
Spawning Pit	1	Artifact
Teferi, Temporal Archmage	1	Planeswalker
Need for Speed	1	Enchantment
Mishra's Factory	1	Land
Tezzeret the Seeker	1	Planeswalker
Inkmoth Nexus	1	Land
Scavenger Grounds	1	Land
Verity Circle	1	Enchantment

Table 30: Creature activated abilities sorted by count

Card	Decks	Mana	Non-mana
Birds of Paradise	37	True	False
Arbor Elf	31	False	True
Deathrite Shaman	31	True	True
Fyndhorn Elves	30	True	False
Llanowar Elves	29	True	False
Elvish Mystic	27	True	False
Elves of Deep Shadow	24	True	False
Avacyn's Pilgrim	18	True	False
Priest of Titania	15	True	False
Noble Hierarch	15	True	False
Boreal Druid	13	True	False
Thrasiros, Triton Hero	13	False	True
Bloom Tender	12	True	False
Jace, Vryn's Prodigy	11	False	True
Elvish Spirit Guide	9	True	False
Razaketh, the Foulblooded	9	False	True
Caustic Caterpillar	8	False	True
Auriok Salvagers	8	False	True
Sylvan Safekeeper	7	False	True
Walking Ballista	7	False	True
Hope of Ghirapur	6	False	True
Wall of Roots	6	True	False
Viscera Seer	6	False	True
Hermit Druid	6	False	True
Quirion Ranger	5	False	True
Apprentice Necromancer	5	False	True
Yisan, the Wanderer Bard	5	False	True
Nomads en-Kor	5	False	True
Cephalid Illusionist	5	False	True

Table 30: Creature activated abilities sorted by count

Card	Decks	Mana	Non-mana
Fatestitcher	4	False	True
Simian Spirit Guide	4	True	False
Vexing Shusher	3	False	True
Devoted Druid	3	True	True
Temur Sabertooth	3	False	True
Wirewood Symbiote	3	False	True
Blood Pet	3	True	False
Children of Korlis	3	False	True
Kiki-Jiki, Mirror Breaker	3	False	True
Scavenging Ooze	3	False	True
Carrion Feeder	3	False	True
Orcish Lumberjack	3	True	False
Najeela, the Blade-Blossom	2	False	True
Spellskite	2	False	True
Siren Stormtamer	2	False	True
Dross Hopper	2	False	True
Skirge Familiar	2	True	False
Metalworker	2	True	False
Overeager Apprentice	2	True	False
Derevi, Empyrial Tactician	2	False	True
Tasigur, the Golden Fang	2	False	True
General Tazri	2	False	True
Shaman en-Kor	2	False	True
Selvala, Heart of the Wilds	2	True	False
Wild Cantor	2	True	False
Breya, Etherium Shaper	2	False	True
Bloodthrone Vampire	2	False	True
Scryb Ranger	2	False	True
Warrior en-Kor	2	False	True
Fauna Shaman	2	False	True
Mausoleum Wanderer	1	False	True
Saffi Eriksdotter	1	False	True
Captain Sisay	1	False	True
Purphoros, God of the Forge	1	False	True
Somberwald Sage	1	True	False
Torch Courier	1	False	True
Goblin Sharpshooter	1	False	True
Noose Constrictor	1	False	True
Treasonous Ogre	1	True	False
Qasali Pridemage	1	False	True
Varolz, the Scar-Striped	1	False	True
Insolent Neonate	1	False	True
Hedron Crawler	1	True	False
Karametra's Acolyte	1	False	True
Beastcaller Savant	1	True	False

Table 30: Creature activated abilities sorted by count

Card	Decks	Mana	Non-mana
Cephalid Inkshrouder	1	False	True
Leaden Myr	1	True	False
Weathered Wayfarer	1	False	True
Palinchron	1	False	True
Morselhoarder	1	True	False
Golgari Grave-Troll	1	False	True
Sliver Queen	1	False	True
Scion of the Ur-Dragon	1	False	True
Voyaging Satyr	1	False	True
Plague Myr	1	True	False
Kiora's Follower	1	False	True
Whirlpool Warrior	1	False	True
Heart Warden	1	True	True
Nezahal, Primal Tide	1	False	True
Joraga Treespeaker	1	True	False
Goblin Welder	1	False	True
Krosan Wayfarer	1	False	True
Duskwatch Recruiter	1	False	True
Arcbound Ravager	1	False	True
Birchlore Rangers	1	True	False
Channeler Initiate	1	True	False
Sakura-Tribe Scout	1	False	True
Tinder Wall	1	True	True
Mother of Runes	1	False	True
Brass Squire	1	False	True
Arcum Dagsson	1	False	True
Reassembling Skeleton	1	False	True
Niv-Mizzet, Dracogenius	1	False	True
Phyrexian Devourer	1	False	True
Ulvenwald Tracker	1	False	True
Palladium Myr	1	True	False
Skirk Prospector	1	True	False
Hapless Researcher	1	False	True
Gorilla Shaman	1	False	True
Prossh, Skyraider of Kher	1	False	True
Blighted Bat	1	False	True
Kamahl, Fist of Krosa	1	False	True
Silver Myr	1	True	False
Hangarback Walker	1	False	True
Manakin	1	True	False
Heritage Druid	1	True	False
Putrid Imp	1	False	True

Table 31: Artifact activated abilities sorted by count

Card	Decks	Mana	Non-mana
Mana Crypt	59	True	False
Sol Ring	58	True	False
Mox Diamond	57	True	False
Chrome Mox	57	True	False
Mana Vault	39	True	False
Lotus Petal	35	True	False
Fellwar Stone	30	True	False
Sensei's Divining Top	30	False	True
Grim Monolith	29	True	True
Lion's Eye Diamond	22	True	False
Talisman of Dominance	21	True	False
Isochron Scepter	19	False	True
Dimir Signet	17	True	False
Talisman of Progress	9	True	False
Aetherflux Reservoir	8	False	True
Izzet Signet	8	True	False
Simic Signet	7	True	False
Walking Ballista	7	False	True
Hope of Ghirapur	6	False	True
Talisman of Indulgence	6	True	False
Prismatic Lens	5	True	False
Basalt Monolith	5	True	True
Voltaic Key	5	False	True
Mox Amber	5	True	False
Mind Stone	4	True	True
Azorius Signet	4	True	False
Everflowing Chalice	4	True	False
Thought Vessel	4	True	False
Scroll Rack	4	False	True
Birthing Pod	4	False	True
Nihil Spellbomb	3	False	True
Staff of Domination	3	False	True
Memory Jar	2	False	True
Altar of Dementia	2	False	True
Spellsrite	2	False	True
Candelabra of Tawnos	2	False	True
Golgari Signet	2	True	False
Metalworker	2	True	False
Springleaf Drum	2	True	False
Fractured Powerstone	2	True	True
Serum Powder	2	True	False
Aether Spellbomb	2	False	True
Lotus Bloom	2	True	False
Rakdos Signet	2	True	False
Codex Shredder	2	False	True

Table 31: Artifact activated abilities sorted by count

Card	Decks	Mana	Non-mana
Orzhov Signet	2	True	False
Breya, Etherium Shaper	2	False	True
Thousand-Year Elixir	2	False	True
Jeweled Amulet	2	True	True
Expedition Map	2	False	True
Thran Dynamo	2	True	False
Citanul Flute	1	False	True
The Chain Veil	1	False	True
Krark-Clan Ironworks	1	True	False
Welding Jar	1	False	True
Hedron Crawler	1	True	False
Bow of Nylea	1	False	True
Chromatic Star	1	True	False
Sky Diamond	1	True	False
Leaden Myr	1	True	False
Honor-Worn Shaku	1	True	True
Plague Myr	1	True	False
Mishra's Bauble	1	False	True
Urza's Bauble	1	False	True
Arcbound Ravager	1	False	True
Talisman of Impulse	1	True	False
Chromatic Sphere	1	True	False
Worn Powerstone	1	True	False
Brass Squire	1	False	True
Phyrexian Devourer	1	False	True
Wayfarer's Bauble	1	False	True
Palladium Myr	1	True	False
Gilded Lotus	1	True	False
Guardian Idol	1	True	True
Silver Myr	1	True	False
Hangarback Walker	1	False	True
Conjurer's Bauble	1	False	True
Silent Gravestone	1	False	True
Manakin	1	True	False
Astral Cornucopia	1	True	False
Spawning Pit	1	False	True

A.8 Tables for Section 3.1: Commander and Color Identity

Table 32: Commanders sorted by count

Commander	Decks	Color
Thrasiros, Triton Hero, Tymna the Weaver	9	WUBG
Thrasiros, Triton Hero, Vial Smasher the Fierce	4	UBRG
Tana, the Bloodsower, Tymna the Weaver	3	WBRG

Table 32: Commanders sorted by count

Commander	Decks	Color
Zur the Enchanter	3	WUB
Kess, Dissident Mage	3	UBR
Breya, Etherium Shaper	2	WUBR
Yidris, Maelstrom Wielder	2	UBRG
Najeela, the Blade-Blossom	2	WUBRG
General Tazri	2	WUBRG
Kraum, Ludevic's Opus, Tymna the Weaver	2	WUBR
Tasigur, the Golden Fang	2	UBG
Sidisi, Undead Vizier	2	B
Captain Sisay	1	WG
The Mimeoplasm	1	UBG
Sliver Queen	1	WUBRG
The Gitrog Monster	1	BG
Arcum Dagsson	1	U
Ikra Shidiqi, the Usurper, Tymna the Weaver	1	WBG
Bruse Tarl, Boorish Herder, Tymna the Weaver	1	WBR
Jace, Vryn's Prodigy	1	U
Godo, Bandit Warlord	1	R
Rashmi, Eternities Crafter	1	UG
Momir Vig, Simic Visionary	1	UG
Varolz, the Scar-Striped	1	BG
Animar, Soul of Elements	1	URG
Scion of the Ur-Dragon	1	WUBRG
Selvala, Heart of the Wilds	1	G
Edric, Spymaster of Trest	1	UG
Yisan, the Wanderer Bard	1	G
Baral, Chief of Compliance	1	U
Meren of Clan Nel Toth	1	BG
Sidisi, Brood Tyrant	1	UBG
Prossh, Skyraider of Kher	1	BRG
Teferi, Temporal Archmage	1	U
Jeleva, Nephilia's Scourge	1	UBR