

THE PWNDERLAND MYCOLOGICAL FIELD GUIDE

A Comprehensive Study of Fungi in Extraordinary Territories

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FOREWORD

"In the peculiar realm of Pwnderland, where logic bends like the Cheshire Cat's grin, the study of fungi reveals truths both beautiful and terrible. Each mushroom tells a story—some of nourishment, others of transformation, and a precious few of mortality itself. The wise mycologist learns to read these stories in cap and stem, in spore and smell, for in Pwnderland, a single mistake can lead one down a rabbit hole from which there is no return."

— Her Royal Highness, The Queen of Hearts
Patron of the Royal Botanical Society

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CHAPTER 4: DANGEROUS AND PSYCHOACTIVE SPECIES ⚠️

"Here be dragons, or in our case, death caps and destroying angels. Approach with the reverence one reserves for the guillotine."

AMANITA MUSCARIA (Fly Agaric)

Common Names: Fly Amanita, Sacred Mushroom, Soma

Wonderland Vernacular: "Mad Hatter's Delight"

PHYSICAL DESCRIPTION:

- **Cap:** 8-25cm diameter, brilliant scarlet to orange-red
- **Surface:** Adorned with distinctive white to cream warts (universal veil remnants)
- **Stem:** 10-20cm tall, white with bulbous base
- **Ring:** Prominent white annulus, often skirt-like
- **Spore Print:** White
- **Odor:** Faintly sweet when fresh, becoming more pungent with age

HABITAT & DISTRIBUTION:

- **Primary Locations:** Birch groves near the Tea Party Grounds
- **Secondary Sites:** Pine forests of the Tulgey Wood
- **Seasonal Occurrence:** Late summer through early winter
- **Soil Preference:** Acidic, well-drained forest floor

TOXICOLOGY:

- **Active Compounds:** Muscimol (0.5-2.5mg/g), Ibotenic Acid (1.5-7mg/g)
- **Onset:** 30-90 minutes post-ingestion
- **Duration:** 4-12 hours
- **LD50:** Approximately 15 fresh caps for average adult

HISTORICAL NOTES: Used by Siberian shamans for millennia. In Pwnderland, often found growing in perfect fairy rings around the Mad Hatter's tea table. Local folklore suggests the mushroom's red color comes from absorbing the madness of endless tea parties.

PSILOCYBE CYANESCENS (Wavy Cap)

Common Names: Wavy Cap, Blue Legs

Wonderland Vernacular: "Cheshire's Grin"

PHYSICAL DESCRIPTION:

- **Cap:** 2-5cm, caramel brown, distinctly wavy margins
- **Stem:** Slender, developing blue bruising when handled
- **Gills:** Adnate, dark brown with age
- **Spore Print:** Dark purple-brown
- **Distinctive Feature:** Intense blue staining when damaged

HABITAT & DISTRIBUTION:

- **Primary Habitat:** Wood chip mulch in the Queen's rose gardens
- **Secondary Sites:** Deciduous forest edges near rabbit warrens
- **Peak Season:** Autumn, particularly after the first frost
- **Growth Pattern:** Clusters of 10-50 specimens

TOXICOLOGY:

- **Active Compounds:** Psilocybin (0.8-1.8%), Psilocin (0.2-0.5%)
- **Potency Rating:** Very High (among the most potent Psilocybe species)
- **Psychological Effects:** Intense visual hallucinations, ego dissolution
- **Duration:** 4-8 hours

FIELD NOTES: The blue bruising is diagnostic—locals say it's the mushroom crying tears of wonder. Often mistaken for the harmless *Hypholoma lateritium*, with potentially life-altering consequences.

PSILOCYBE CUBENSIS (Golden Teacher)

Common Names: Golden Teacher, Cuban, Gold Cap

Wonderland Vernacular: "The Professor"

PHYSICAL DESCRIPTION:

- **Cap:** 5-8cm, golden-yellow to light brown
- **Stem:** Thick, hollow, with persistent ring
- **Bruising:** Moderate blue discoloration when pressed
- **Veil:** Partial veil leaves dark spore deposits on stem

HABITAT & DISTRIBUTION:

- **Preferred Substrate:** Cow dung in the Duchess's pastures
- **Climate Requirements:** Warm, humid conditions
- **Growing Season:** Spring through early autumn
- **Distribution:** Widely scattered throughout southern Pwnderland

CULTURAL SIGNIFICANCE: Known as the "Golden Teacher" for its reportedly educational psychological effects. The March Hare claims these mushrooms taught him the true meaning of time, though this may explain his perpetual lateness.

INOCYBE VIOLACEA (Violet Fiber Head)

Common Names: Violet Inocybe, Purple Poison

Wonderland Vernacular: "The Queen's Revenge"

PHYSICAL DESCRIPTION:

- **Cap:** 3-7cm, deep purple-brown with fibrous texture
- **Stem:** Pale with distinctive violet undertones
- **Gills:** Initially pale, becoming brown with spore maturity
- **Texture:** Notably fibrous, hence "fiber head"

HABITAT & DISTRIBUTION:

- **Location:** Mixed forests throughout Pwnderland
- **Soil Type:** Rich, organic matter
- **Association:** Mycorrhizal with oak and beech trees
- **Seasonality:** Late summer through autumn

TOXICOLOGY - EXTREME DANGER:

- **Primary Toxin:** Muscarine (up to 45mg per specimen)
- **Mechanism:** Parasympathetic overstimulation
- **Symptoms:** SLUDD syndrome (Salivation, Lacrimation, Urination, Defecation, Diarrhea)
- **Fatality Rate:** 40-50% without immediate treatment
- **Antidote:** Atropine sulfate (must be administered within 1 hour)

WARNING: Often confused with edible purple species. The Queen of Hearts reportedly uses these in her more permanent sentences.

AMANITA BISPORIGERA (Destroying Angel)

Common Names: Destroying Angel, Angel of Death, White Death

Wonderland Vernacular: "The Final Silence"

PHYSICAL DESCRIPTION:

- **Cap:** 5-10cm, pure white, smooth and innocent-looking
- **Stem:** White, with prominent bulbous base (volva)
- **Ring:** White, membranous, persistent
- **Gills:** Free, remaining white throughout maturity
- **Spore Print:** White
- **Overall Appearance:** Deceptively beautiful and pristine

HABITAT & DISTRIBUTION:

- **Primary Habitat:** Oak and mixed hardwood forests
- **Specific Locations:** Shadowy groves near the Jabberwocky's lair
- **Soil Preference:** Rich, well-drained forest soils
- **Seasonal Pattern:** Mid-summer through early autumn
- **Growth Habit:** Solitary or in small scattered groups

TOXICOLOGY - UNIVERSALLY FATAL:

- **Primary Toxins:** α -Amanitin (60-90mg per cap), β -Amanitin, Phalloidin
- **Lethal Dose:** 30-50 grams fresh weight (less than one cap)
- **Mechanism:** Irreversible liver cell destruction
- **No Known Antidote:** Medical intervention only delays the inevitable

CLINICAL COURSE:

1. **Phase I (6-12 hours):** Severe gastrointestinal distress
2. **Phase II (24-48 hours):** False recovery period
3. **Phase III (3-7 days):** Liver failure, kidney failure, death

SYMBOLIC SIGNIFICANCE: Throughout history, the pure white appearance has made this mushroom the universal symbol of hidden death. Pirates marked poison with its likeness, apothecaries used its image on bottles of lethal draughts, and even today, the skull and crossbones ☠ derives from this "angel of death." In Pwnderland folklore, it's said that even Death himself refuses to touch these mushrooms, for they make his work too easy.

EMERGENCY PROTOCOL: If consumption is suspected:

1. Contact emergency services immediately
2. Preserve specimens for identification
3. Induce vomiting only if within 1 hour of ingestion
4. Begin IV fluid resuscitation
5. Consider liver transplant evaluation
6. Notify next of kin

AMANITA PHALLOIDES (Death Cap)

Common Names: Death Cap, Death Cup

Wonderland Vernacular: "The Queen's Final Card"

PHYSICAL DESCRIPTION:

- **Cap:** 6-15cm, olive-yellow to greenish-brown
- **Stem:** White with prominent cup-like volva at base
- **Ring:** Large, white, skirt-like
- **Odor:** Sickly sweet, like honey mixed with decay

DISTRIBUTION: Increasingly common near the Card Guards' barracks. Some theorize the Queen imported these from the Old World for her more "permanent" solutions to court disputes.

TOXICITY: Even more potent than *A. bisporigera*, with amatoxin concentrations up to 150mg per specimen. Historical records show a 95% fatality rate, earning it the grim title of "Most Successful Assassin in the Fungal Kingdom."

SAFETY PROTOCOLS AND IDENTIFICATION KEYS

THE FOUR PILLARS OF MUSHROOM SAFETY:

1. **NEVER** consume any mushroom unless identified by an expert
2. **PRESERVE** specimens for identification (wrap in wax paper, never plastic)
3. **PHOTOGRAPH** in situ before collection (spore prints are crucial)
4. **REMEMBER** that cooking does not destroy most mushroom toxins

EMERGENCY IDENTIFICATION CHECKLIST:

RED FLAGS - POTENTIAL AMANITA:

- ✓ White spore print
- ✓ Ring around stem
- ✓ Bulbous base or cup (volva)
- ✓ Free gills
- ✓ Growing from soil (not wood)

If ALL five characteristics present: ASSUME DEADLY until proven otherwise

SPORE PRINT TECHNIQUE:

1. Remove stem flush with cap
 2. Place cap gill-side down on white paper
 3. Cover with bowl, wait 4-12 hours
 4. Spore color is diagnostic for many species
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REGIONAL DISTRIBUTION MAPS

HIGH-RISK ZONES:

Zone Alpha - Extreme Caution:

- The Dark Wood (Amanita species prevalent)
- Queen's Private Gardens (Multiple toxic species)
- Abandoned Tea Party Sites (Psychoactive species)

Zone Beta - Moderate Risk:


- Public Parks and Commons
- Rabbit Warren Periphery
- Caucus Race Grounds


Zone Gamma - Relatively Safe:


- Well-maintained lawns
- Active agricultural areas
- Market gardens

TRADITIONAL WARNING SYMBOLS AND THEIR MEANINGS

Throughout history, various cultures have developed symbols to warn of dangerous fungi:

 **Skull and Crossbones:** Universal symbol for deadly poison, originally derived from the appearance of Amanita poisoning victims. Still the most recognized warning symbol worldwide.

 **Triangle with Exclamation:** Modern standard for general biological hazards.

 **Mushroom with Death Symbol:** Traditional mycological warning, found in medieval texts.

Red Cross on White Background: Historical European symbol for toxic fungi, now associated with medical aid.

These symbols appear in ancient texts, on poison bottles, and even in children's fairy tales as visual warnings passed down through generations.

APPENDIX B: LEGAL CONSIDERATIONS

Under Pwnderland Statute 42.7, the following regulations apply:

- **Possession** of Amanita species: Class A felony
- **Distribution** of psychoactive mushrooms: 5-15 years imprisonment
- **Cultivation** of toxic species: Life sentence or off with their head (Queen's discretion)
- **Research Permits:** Available through the Royal Scientific Academy

Medical Disclaimer: This guide is for educational purposes only. The authors assume no responsibility for misidentification or misuse of the information contained herein. When in doubt, contact the Pwnderland Poison Control Center at 1-800-RABBIT-HOLE.

BIBLIOGRAPHY AND FURTHER READING

1. Caterpillar, A. (2024). "Toxicological Studies of Wonderland Fungi." *Journal of Applied Mycotoxicology*, 47(3), 234-267.
2. Hatter, M. (2023). "Psychoactive Mushrooms and Temporal Perception Disorders." *Pwnderland Medical Review*, 15(6), 89-102.
3. Sporington, M. (2025). "Climate Change Effects on Fungal Toxin Production." *Royal Botanical Society Proceedings*, 78(2), 445-478.
4. Cheshire, C. (2022). "Grinning in the Face of Danger: A Philosophical Approach to Mushroom Identification." *Pwnderland Philosophy Quarterly*, 33(4), 12-28.
5. Hearts, Q. (2021). "Off With Their Heads: A Historical Analysis of Mushroom Poisoning in Pwnderland Courts." *Royal Historical Society Papers*, 156, 78-134.

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"Remember, dear reader: in the study of fungi, there are old mycologists and bold mycologists, but there are no old, bold mycologists."

— Professor Mycelia Sporington

Final words of wisdom