ISU Monarch Data Summary for NCIG

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Table 1 provides mean count of milkweed ramets averaged across all data collection events. Values in table represent the specific counting unit for each species, not necessarily a whole plant. Table 5 provides mean density of milkweed ramets (per 100m2) averaged across all data collection events. Values in table represent the specific counting unit for each species, not necessarily a whole plant.

Table 1: 2017 ramet plant species: mean count across all surveys

Nectar Plant Species	tallla	tall2a	tappla	tarm1b	tarm2a	therla	tbcr2a	tber1a .	tber3a	tbydla	tbyd2a	tcrala t	tcrela t	davla t	dun2a t	dun3a t	grola .	tgro2a th	tharla tjo	jonla tni	ela	tnknla tn	nkn2a tn	tnorlb tp	piola .
butterfly milkweed ramet		-		1	•	-		-	-	0.3	7.0	-	-	-						-		-			2.0
common milkweed ramet	•	1	1	2.0	•	•	•	•	•	2.7	1.7	0.3	,	111.0	•	,	,	4.7	4.0	8.3	13.3	,	,	88.3	8.3
swamp milkweed ramet	•	•	1	0.3	1	1	1	٠	٠	1.0	1	,	1	٠	1	1		,	,	,		1		0.6	1.7

Table 2: 2018 ramet plant species: mean count across all surveys

Nectar Plant Species	tallla t	tall2a t	tappla ta	tarm1b	tarm2a	therla	tbcr2a	tber 1a	tber3a 1	tbydla t	by d2a	tcrala t	crela to	lavla tdı	un2a t	dun3a tf	tfisla tgrola	t g	ro2a tharla	a tjonla	tniela	tnknla	tnkn2a	tnor1b t
butterfly milkweed ramet					1	0.3				0.3		1				0.3					•		1	
common milkweed ramet	2.7	•	0.3	•	0.3	1.3	0.3	1.0	0.3	2.3	1.7	2.3	0.3	1.7	ı	1.0	-	0.7	4.7 5.	7 2.3	16.0	•	0.3	9.3
swamp milkweed ramet	,	•	0.3	1	1	1	•	1	1	1	0.3	1	1	1		1	,	0.3			1	•	1	1.7

Table 3: 2017 ramet plant species: mean count across all surveys

Table 4: 2018 ramet plant species: mean count across all surveys

tall2
ommon milkweed ramet 4

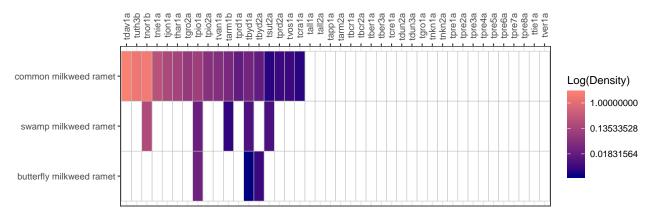


Figure 1: This is a heatmap for density of ramet species with transects on the columns and species on the rows sorting transects by average density and sorting species by average presence for year 2017.

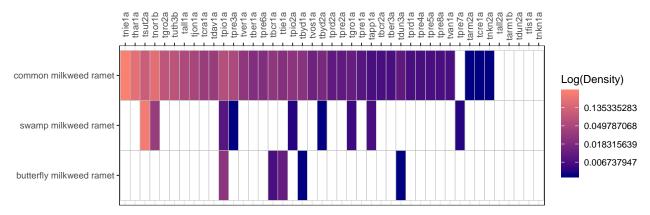


Figure 2: This is a heatmap for density of ramet species with transects on the columns and species on the rows sorting transects by average density and sorting species by average presence for year 2018.

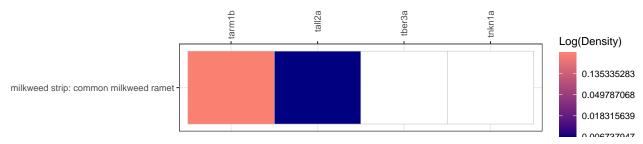


Figure 3: This is a heatmap for density of milkweed species with transects on the columns and species on the rows sorting transects by average density and sorting species by average presence for year 2017.

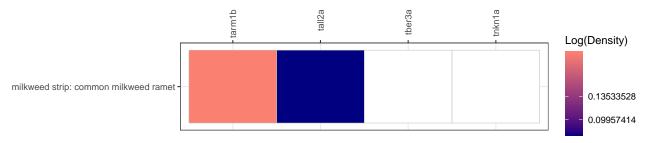


Figure 4: This is a heatmap for density of milkweed species with transects on the columns and species on the rows sorting transects by average density and sorting species by average presence for year 2018.

Table 5: 2017 Nectar plant species density: average density (count / m2) across all rounds

butterfly milkweed ramet 0.00 0.01 0.03 0.02 0.00 - 2.22 0.08 0.13 0.17 0.27 0.01 0.01 0.01 0.01	Nectar Plant Species t	tallla ta	all2a ta	tappla .	tarm1b	tarm2a	tbcrla	tbcr2a	tber 1a	tber3a	tbyd1a	tby d2a	tcrala	tcrela	tdavla	tdun2a	tdun3a	tgrola	tgro2a	thar la	tjonla	tniela	tnkn1a	tnkn2a	tnor1b	tpiola
nmon milkweed ramet 0.03 0.03 0.02 0.00 - 2.22 0.08 0.13 0.17 0 amp milkweed ramet 0.01 0.01	butterfly milkweed ramet		,		1	•	•	1	1	1	00.0	0.01	-	1	1	1	1	1	1	1	1		•	•		0.03
amp milkweed ramet 0.01	common milkweed ramet	,	,	•	0.03	•	1	1	1		0.03	0.02	0			1	•	1	0.08	0.13	0.17	0.27			1.77	0.10
	amp milkweed ram	,		•	0.01	1	1	1	1		0.01			1	1	1	1	1	1	1	1	•	1	1	0.18	0.02

Table 6: 2018 Nectar plant species density: average density (count / m2) across all rounds

Nectar Plant Species	tallla t	tall2a t	a tappla t	tarm1b	tarm2a	tbcrla	tbcr2a	bcr2a tber1a	tber3a	tbyd1a	tbyd2a	tcrala	tcrela	tdavla	tdun2a	tdun3a	tfisla 1	tgrola	tgro2a	tharla	tjonla	tniela 1	inknla t	nkn2a	tnor1b
butterfly milkweed ramet				٠	•	0.01	1	1	1	00.0	1	1	1	•	1	00.00		1	•						
common milkweed ramet	0.05	,	0.01	•	0.00	0.03	0.01	0.02	0.01	0.02	0.02	0.03	00.00	0.03		0.01	,	0.01	80.0	0.19	0.02	0.32	•	00.0	0.19
swamp milkweed ramet	1	٠	0.01	•	1	1	1	1	1	1	00.00		1	1	1	1	1	0.01	1	1	1	1	•	•	0.03

Table 7: 2017 Nectar plant species density: average density (count / m2) across all rounds

t Species tall2a tarm1b t rip: common milkweed ramet 0.01 0.34
Species tall2: p: common milkweed ramet 0.0
t Species rip: common milkweed ramet

Table 8: 2018 Nectar plant species density: average density (count / m2) across all rounds