ISU Monarch Data Summary for Pork Sites

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Table 1, 2, and 3 provide mean count of nectar plant species averaged across all data collection events. Table 7 provides mean count of milkweed ramets. Values in table represent the specific counting unit for each species, not necessarily a whole plant. Table 4, 5, and 6 provide nectar plant species density (per 100m2) averaged across all data collection events. Table 9 and 10 provides mean density of milkweed ramets. Values in table represent the specific counting unit for each species, not necessarily a whole plant. Figures 1, 2, 3, 4, and 5 are heatmaps which plot the log density of species (planted and non-planted) with transects on the columns and species on the rows; transects are sorted by average density and species are sorted by average presence.

Table 1: 2016 nectar plant species: mean count across all surveys

Nectar Plant Species tappla therla therea tprela	tappla	tbcr1a	tbcr2a	tprela	$_{\rm tpre2a}$	tpre3a	tpre4a	$_{ m tpre5a}$	$_{ m tpre6a}$	tpre7a	$_{ m tpre8a}$	ttiela
common dandelion	'	1	ı	1.0	5.0	26.7	26.7 18.7	19.0	1.0 13.7	13.7	17.7	ı
plantain	1	1	1	98.3	6.7	1	1	1	1	17.7	37.3	1
red clover	16.7	1	1	1	1	1	1	1	1	ı	1	1
white clover	3.3	42.0	1	116.3	13.3	763.3	318.3	318.3 624.3	41.7	279.3	365.7	20.7
yellow sweet clover	•		1	•				1.3		1		1

Table 2: 2017 nectar plant species: mean count across all surveys

Nectar Plant Species	tappla therla ther2a tprela tpre2a tpre3a tpre4a tpre5a tpre6a tpre7a tpre8a ttiela	$_{ m tbcrla}$	tbcr2a	$_{ m tprela}$	$_{ m tpre2a}$	$_{ m tpre3a}$	$_{ m tpre4a}$	$_{\rm tpre5a}$	$_{ m tpre6a}$	tpre7a	$_{ m tpre8a}$	ttie1s
alfalfa	1	16.7	1	1	1	1	1	1	1	1	1	
black eyed susan	10.7	ı	1	0.3	1.7	1.7	0.3	ı	1.7	0.3	1	0.3
black medic	1.0	102.0	1.3	10.3	ı	8.3	0.7	6.7	0.3	ı	2.0	·
blue vervain	1.0	ı	ı	1	ı	1	1	ı	1	ı	1	•
common cinquefoil	1	1	1	1	1	1	5.3	1	1	1	0.3	
common dandelion	3.0	5.7	1.7	1.0	6.0	0.9	1.3	2.0	1	ı	ı	1.0
compass plant	0.3	1	1		1	1		1	1	1	1	·
eastern daisy fleabane	•	1	1		33.3	1	ı	1	1	1	1	
marestail	20.3	1	1	1	1	1	1	'	1	1	1	
musk thistle	1	1	1	1	1.0	1	1	1	1	1	1	
ox eye sunflower	1	1	1	1	1	1	1	1	1	1	1	0.3
partridge pea	2.7	5.0	4.0	1	1	0.3	1	1	0.3	1	1	1.3
pineapple weed	•	1	1	1	10.7	1	1	1	1	1	1	
prostrate vervain	1	70.0	1	1	1	1	ı	1	1	1	155.0	
queen annes lace	1	1	1	1	1	1.3	I	ı	1	1	1	
red clover	105.7	1	1	1	1	1		1	1	1	1	
shepherds purse	•	1	1		1	1	ı	1	1	36.7	1	
smartweed	84.0	17.7	39.7	1	151.0	15.0	9.0	10.7	119.0	1	7.3	3.7
velvetleaf	0.7	1	1	1	1	1	I	ı	1	1	1	
white clover	249.0	33.7	1	9.0	3.3	18.0	32.3	49.3	3.0	11.0	22.3	
vellow coneflower	1	1	1		1	1.7	ı	1	1	ı	1	

Table 3: 2018 nectar plant species: mean count across all surveys

The control of the co	riant openes		37.700										
bell bell bell bell bell bell bell bell	alialia	0.3	1	1	1	ı	1	' 1	1 0	1 1	1	ı	
th the control of the	black eyed susan	1	1	1	1	1	1	2.7	20.3	2.7	7.3	1	
the color of the c	black medic	1	85.3	1	86.3	33.3	3.3	1.7	21.7	1	35.0	36.7	
ch c		1	1	1	2.7	1	21.7	7.7	1	1	1	1	
cold	blue vervain	1	1	1	20.0	1	65.7	1	35.0	5.0	1	1	
ed e	bog yellow-cress	1	1	1	7.3	1	0.7	1	38.0	1	1	ı	
tch 8.3	butterfly milkweed	'	'	'		1		'	1	'	'	1	Ξ
ch 8.3 12.3 5.3 1.7	canada goldenrod		'		'	,	2.0		1	'	0.3	ı	
tch 8.3 - 1. 12. 5. 1.7 - 0.7 - 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	canada lettiice	1	1	'	'	') I	'	'	1) I	'	21,
Say 230 1230 2.3 1.7 0.1 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2	canada milk watch		1		1	1		0	1	1		1	i -
billion billio	consider thirth	0	ı	Ì	1.0.0	n c	1 -	:	I	ı	ı	ı	99
by partitions and the state of	canada unsue	0.0	1	1	12.9	0.0	10.1		ı	1		ı	2.07
primtose	catmp	۱ (1 6	ı	1 6	1 6	7.01	1 0	' 6	1 1	, d	1 0	9
primtrose - 2.7	common cinquetoil	3.0	23.0		94.3	119.3	273.0	205.0	35.3	7.987	153.3	264.0	10.
abane - 2.7 - 28.7 23.3 23.3 23.3	common dandelion	1	5.0	2.3	0.7	12.0	2.0	2.0	0.0	0.7	T:0	×	-
abane - 65.0 - 7.7 277.0 0.7 0.3 0.3 1.7 23.7 - 1 187 101.0 - 2.3 1.0 - 7 188 4.0 1.0 0.3 5.7 18.7 24.0 5.7 6.7 3.3 0.9 18.	common evening primrose	1	2.7	1	28.7	1	1	1	23.3	1	1	1	
abane	cup plant	1	1	65.0	1	1	1	1	1	1	1	1	
nague - 137 101.0 - 2.3 1.0 - 0.7 - 0.3 - 0.7 - 0.7 - 0.3 - 0.7 - 0.7 - 0.3 - 0.7 - 0.7 - 0.3 - 0.7 - 0.3 - 0.7 - 0.3 - 0.7 - 0.3 - 0.7 - 0.3 - 0.7 - 0.3 - 0.3 - 0.7 - 0.3 -		1	1	1	0.7	277.0	0.7	0.3	0.3	1.7	23.7	1	
nngue	field pennycress	1	13.7	101.0	1	1	1	1	1	1	1	1	
bangue 10.7 25.3 25.7 1.0 31.0 38.3 0.7 1.3	field thistle	1	1	1	2.3	1.0	1	0.7	1	1	1	1	
Fig. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	foxglove beardtongue		•		10.7	25.3	25.7	1.0	31.0	38.3		0.7	16.
40 1.0 0.3 5.7 18.7 24.0 5.7 6.7 3.3 - 0.7 1.3.	colden alexanders	'	١	'	. ') I	. '))	'	· α	-
over 1.3	boar mounting		-	6	1 14	10	0.70	1 14	2	6 6		1 0	;
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	iloary vervain	0.4	1.0	 	7.0	10.1	74.0	7.0	7.0	0.0		7.0	10.
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Ironweed	0.3	1 1	L.3	1	ı	ı	1	1	1	ı	1	
sd - 1.3 - 2.3 26.3	marestail	13.7	1.7	0.7	1	1	1	1	0.3	1	1	0.3	29.
e 62.7 71.0 4.3 110.0 189.7 477.0 91.3 166.7 1.3 28.7 145.3 1 flower	morning glory	1	1.3	1	1	1	1	1	1	1	1	1	
sign booker	musk thistle	1	1	1	1	44.3	3.3	1	1	1	1	1	
Fraction of the control of the contr	nodding stickseed	1	1	1	3.0	26.3	1	1	1	1	1	1	
aflower - 1.3 - 0.7 - 0.7 - 0 0.7 - 0 0 0	ox eve sunflower	62.7	71.0	4.3	110.0	189.7	477.0	91.3	166.7	1.3	28.7	145.3	128.0
lil	pale purple coneflower	'	'	1.3	'	0.7	'	'	1	'	'	1	2
III	nartridge nes				1 3	1.3						6	
In	paratrage pea				0.1	7:0						i 0	105
n	pincappie wed	1	1	1 1	1	1		1	1	1	1	1	170
bover	prairie cinqueioii	1	· 1	0.7	· 1	1 0	1	1	1	1	1	1	
be cover control of the control of t	prickly lettuce	1	6.7	1	42.7	40.3	1	1	1	1	1	1	
e	prostrate vervain	1	0.7	1	1	1	ı	1	1	1	99.3	24.3	
e 290.7 176.3 - 16.7 1.7 8.3 - 8.3 -		1	1	1	1	1	1	1	1	0.7	1	1	<u>;</u>
18.3	queen annes lace	1	1	1	1	1	1	1	1	1	8.3	1	
in mint 51.3 77.0 1.7 793.0 109.0 1245.3 10.3 4.0 - 18.7 53.0 1.3 - 4.3 68.3 - 104.7 54.3 78.3 - 10.0 - 221.7 2 - 18.3 - 104.7 54.3 78.3 - 10.0 - 22.7 - 221.7 2 - 18.3 - 18.3 - 104.7 54.3 78.3 860.0 345.0 836.7 337.0 18.3 - 18.3 - 18.3 - 18.3 860.0 345.0 836.7 337.0 18.3 - 18.3 - 19.0 143.7 409.3 788.3 860.0 345.0 836.7 11.0 12.3 - 18.3 - 18.3 119.0 143.7 409.3 788.3 860.0 345.0 836.7 11.0 12.3 - 18.3 - 18.3 119.0 143.7 1409.3 788.3 860.0 345.0 836.7 11.0 12.3 - 18.3 - 18.3 119.0 143.7 14.3 14.7 12.3 11.0 12.3 - 18.3 - 18.3 11.3 14.7 12.3 11.0 11.3 - 18.3 - 18.3 11.0 11.0 11.3 14.7 18.3 - 18.3 - 18.3 11.0 11.0 11.3 14.7 18.3 - 18.3 - 18.3 11.0 11.0 11.3 14.7 18.3 - 18.3 - 18.3 11.0 11.0 11.3 14.7 18.3 - 18.3 - 18.3 11.0 11.0 11.3 14.7 18.3 - 18.3 - 18.3 18.3 18.3 18.3 18.3 18.3 18.3 18.3	red clover	290.7	176.3	1	16.7	1.7	1	1	1	1	1	1	
se - 4.3 68.3	rough cinquefoil	1	1	1	1	1	1	1	ı	1	1	ı	16.
18.3 - 104.7 54.3 78.3 - 10.0 - 221.7 2 Lain mint 9.3 1.0 22.7 1.0 Lain mint 9.3	shepherds purse	1	4.3	68.3	1	1	1	1	1	1	1	1	
tain mint	smartweed	18.3	1	1	104.7	54.3	78.3	1	10.0	1	1	221.7	226.7
tain mint 1.7	stiff goldenrod	1	1	1	'	1	1.0	'	1	1	'	1	
tain mint 9.3	velvetleaf	1	1	1.7	1	1	1	1	ı	1	1	ı	
ster	virginia mountain mint	1	1	1	9.3	ı	1	1	1	22.7	1	1	
ster 0.3 37.0 0.3 37.0 0.3 37.0 8.0 8.0	white clover	51.3	717.0	1.7	793.0	109.0	1245.3		1970.3	498.7	403.0	1373.3	4
t - 125.7 0.3 78.0 3.0 2.3 10.3 4.0 - 8.0 - 8.0 - 18.7 55.0 55.0 55.0 55.0 55.0 55.0 55.0 55	white heath aster	1	1	1	1	ı	1	1	ı	0.3	37.0	ı	
t 0.7 - 39.7 71.7 50.7 36.0 31.7 - 18.7 53.0 3.7 13.3 0.3		1	125.7	0.3	78.0	3.0	2.3	10.3	4.0	1	8.0	1	
wer 153.7 119.0 143.7 409.3 788.3 860.0 345.0 836.7 337.0 268.0 528.3 6 lover 58.0 - 6.7 4.3 1.3 14.7 23.7 - 11.0 12.3	wild bergamot	0.7	'	'	39.7	71.7	50.7	36.0	31.7	'	18.7	53.0	81.
wer 153.7 119.0 143.7 409.3 788.3 860.0 345.0 836.7 337.0 268.0 528.3 slover 58.0 - 6.7 4.3 1.3 14.7 23.7 - 11.0 12.3	wild mistard	'	,			. 1	. 1	'		,	3.7	13.3	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	wild parsnip	0.3	,	1	'	1	1	'	ı	,	; ') 1	
Alover 58.0 - 6.7 4.3 1.3 14.7 23.7 - 11.0 12.3		153.7	119.0	143.7	409.3	788.3	860.0	345 0	836.7	337 0	0.896	528.3	612
30VE - 0.0 - 0.1 4.0 1.0 14.1 20.1 - 11.0 12.0		. ox	2	: :	6.7	> ~		7 5 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	25.7	2) (1
		0.00	ı	1	3	1						· ·	

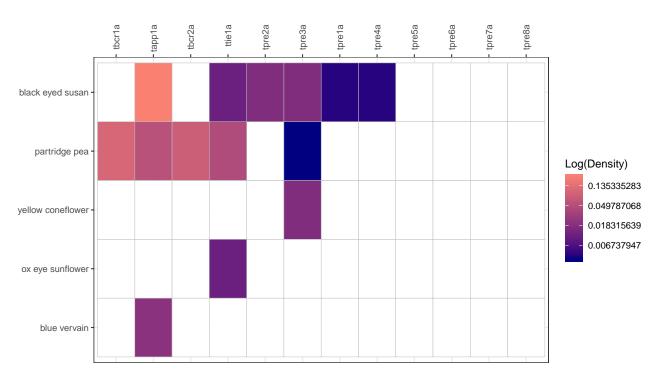


Figure 1: This plot is a heatmap for density of nectar species planted with transects on the columns and species on the rows sorting transects by average density and sorting species by avg presence for year 2017.

Table 4: 2016 nectar plant species density: average density (count / m2) across all rounds

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

01 01	ιαρρια	COCLIA	DCI 7a	$_{ m tprela}$	$_{ m tpreza}$	$_{ m tpre3a}$	$_{ m tpre4a}$	tappla therla therea tprela tprela tprela tpreda tpreda tprefa tprefa tpreda ttiela	$_{ m tpre6a}$	tpre7a	$_{\rm tpresa}$	ttiela
altalta	1	0.33	1	1	1	1	1	1	1	1	1	1
black eyed susan	0.21	1	ı	0.00	0.02	0.02	0.00	1	1	1	1	0.01
black medic	0.02	2.04	0.03	0.13	1	0.08	0.01	1	İ	1	ı	ı
blue vervain	0.02	1	1	1	1	1	1	1	İ	1	1	1
common cinquefoil	1	1	1	1	1	1	0.07	1	İ	1	1	1
common dandelion	0.06	0.11	0.03	0.01	0.06	0.06	0.02	1	ı	1	1	0.03
compass plant	0.01	ı	1	1	1	1	ı	1	ı	1	1	1
eastern daisy fleabane	1	1	1	1	0.33	1	1	1	1		1	
marestail	0.41	ı	ı	1	1	1	ı	1	ı	1	1	1
musk thistle	1	1	ı	1	0.01	1	ı	1	1	1	1	1
ox eye sunflower	1	1	ı	1	1	1	ı	1	1	1	1	0.01
partridge pea	0.05	0.10	0.08	1	1	0.00	ı	'	1	1	1	0.04
pineapple weed	1	1	1	1	0.11	1	1	1	1	1	1	'
prostrate vervain	1	1.40	1	1	1	1	1	1	1	1	1	'
queen annes lace	1	1	ı	1	1	0.01	ı	1	1	1	1	1
red clover	2.11	1	1	1	1	1	ı	1	1	•	1	
shepherds purse	1	1	1	1	1	1	1	1	1	1	1	1
smartweed	1.68	0.35	0.79	1	1.51	0.15	0.11	1	1	1	1	0.12
velvetleaf	0.01	1	ı	1	1	1	ı	1	1	1	1	1
white clover	4.98	0.67	1	0.11	0.03	0.18	0.40	1	1	1	1	1
yellow coneflower	1	ı	1	1	1	0.02	ı	1	ı	1	1	1

Table 6: 2018 nectar plant species density: average density (count $\ /\ \mathrm{m2}$) across all rounds

yed sussun condict 171 1 108 0.33 0.02 0.03 c. c. c. c. c. c. c. c. c. c. c. c. c.		adply a mind a middle	37.70	•	1								
redic assens	alfalfa	0.01	ı	1	ı	1	ı	1	ı	1	1	1	
racidic - 1.71 - 1.08 0.33 0.02	black eyed susan	1	1	1	1	•	•	0.03	1	1	•	1	
reampion - 0.05 - 0.05 - 0.00	black medic	1	1.71	1	1.08	0.33	0.03	0.02	1	1	•	1	•
regidentical control of the control		1	1	1	0.03	1	0.22	0.10	1	•	1	1	
y milkweed	blue vervain	1	1	1	0.25	1	0.66	1	1	•	1	1	
y milkweed by milkweed by milkweed by milkweed by milkweed by milkweed by milk vetch by milk by milk vetch by milk vetch by milk vetch by milk vetch by milk b	bog yellow-cress	'	1	1	0.00	'	0.01	•	1	'	'	1	
goldenod the goldenod this goldenod this decimal which which the this decimal which which which has been a careful goldenod to a car	butterfly milkweed	1	ı	1	ı	1	1	1	1	1	ı	1	0.03
hettrace milk vecch milk vec	canada goldenrod	1	ı	1	1	•	0.02	1	1	1		1	Ċ
thistle 0.17 - 1 0.15 0.05 0.02 - 1 0.01 - 1 0.01 - 1 0.01 - 1 0.01 - 1 0.01 - 1 0.01 - 1 0.01 - 1 0.01 - 1 0.01 - 1 0.01 - 1 0.01 - 1 0.01 - 1 0.01 - 1 0.01 - 1 0.01 - 1 0.01 - 1 0.02 0.03 - 1 0.00 -	canada lettuce	ı	ı	1	ı	1	ı	1	1	1	1	1	0.72
thistle 0.17 - 0.15 0.05 0.02 - 0.14 orderedial 0.06 0.46 - 1.18 1.19 2.73 2.56 - 0.03 orderedial 0.06 0.46 - 1.18 1.19 2.73 2.56 - 0.03 orderedial 0.06 0.46 - 1.18 1.19 2.73 2.56 - 0.03 orderedial 0.06 0.46 - 1.20 0.20 0.03 0.01 0.00 0.00 0.00 0.00 0.00 0.0	canada milk vetch	1	1	1	1	1	1	0.01	1	1	1	1	0.03
n cirquefolio	canada thistle	0.17	1	1	0.15	0.05	0.03	'		1	'	1	0.78
n cinquefail 0.06 0.46 - 1.18 1.19 2.73 2.56	catnip		1	ı	1	1	0.11	1	1	1	1	ı	
eljon - 0.10 0.05 0.08 0.12 0.02 0.03	common cinquefoil	0.00	0.46	1	1.18	1.19	2.73	2.56	1	1	'	1	0.56
Ing primarose - 0.05 - 0.36	common dandelion		0.10	0.05	0.08	0.12	0.02	0.03	1	1	'	1	0.23
fleabane - 1.30 - 1.30 - 1.41		'	0.05) I	0.36	<u> </u>	1) I	'	1	'	1	
ses - 0.27 2.02	cup plant	'	1	1.30	1	'	1	'	'	'	1	'	·
ss - 0.27 2.02 0.01 tong ders 0.08 0.01 0.03 0.01 - 0.01 tong 0.01 0.07 0.09 0.01 0.07 0.09 0.01 0.07 0.09 0.01 0.07 0.09 0.01 0.07 0.09 0.01 0.07 0.09 0.01 0.07 0.09 0.01 0.07 0.03 0.01 0.04 0.03 0.01 0.04 0.03 0.01 0.00 0.00 0.01 0.00	isv	'	1) I	0.01	2.77	0.01	0.00	1	,	'	1	·
trongue 0.03 0.01 - 0.01 - 0.01 - 0.01 - 0.01 - 0.01 - 0.03 0.01 - 0.01 - 0.01 - 0.01 - 0.01 - 0.01 - 0.01 - 0.01 - 0.00 0.01 - 0.03 0.01 - 0.03 0.01 - 0.03 0.01 - 0.04 0.05 0.01 - 0.03 0.01 - 0.04 0.05 0.01 - 0.04 0.05 0.01 - 0.04 0.05 0.01 - 0.04 0.05 0.01 - 0.04 0.05 0.01 - 0.04 0.05 0.01 - 0.04 0.05 0.01 - 0.00 0.01 0.01	field pennycress	1	0.27	2.03					1	•		1	
trongue 0.13 0.25 0.26 0.01 0.13 0.25 0.26 0.01	field thistle	1	. 1	1	0.03	0.01	1	0.01	1	1	'	1	'
ters 0.08 0.02 0.01 0.03	foxylove beardtongue	1	,	,	0.13	0.25	0.26	0.01	1	1	'	1	0.53
6.08 0.02 0.01 0.07 0.19 0.24 0.07	golden alexanders	,	1	') I) ' !) ' !			,	١	'	0.0
eed	boart transition	800	600	0.01	0.07	0.10	0.97	0.07					0.36
eed	income d	0.00	0.0	0.01	0.0	0.13	1	0.0	1		1	1	
eed - 0.03 0.01 0.44 0.03 0.44 0.03 0.44 0.03 0.44 0.03 0.04 0.26 0.04 0.26 0.01 0.01 0.01 0.01 0.02 0.01 0.02 0.01 0.02 0.01 0.03 0.01 0.01 0.03 0.01 0.01 0.01 0.01 0.01 0.01 0.01	Ironweed	0.01	١ ,	0.03	ı	ı	ı	ı	ı	ı	1	ı	
eed 0.03 0.44 0.03 0.44 0.03 0.04 0.26 0.04 0.26 0.05 0.01 0.02 0.01 0.02 0.01 0.03 0.01 0.03 0.01 0.03 0.01 0.03 0.01 0.03 0.01 0.03 0.00 0.01 0.03 0.00 0.01	marestall	0.77	0.03	0.01	1	'	1	1	1	1	1	1	
recd	morning glory	1	0.03	1	1	•	1	1	1	1	•	1	
recd 1.25 1.42 0.09 1.38 1.90 4.77 1.14	musk thistle	1	1	1	1	0.44	0.03	1	1	1	1	ı	•
ret 1.25 1.42 0.09 1.38 1.90 4.77 1.14	nodding stickseed	1	1	1	0.04	0.26	1	1	1	1	1	1	'
d	ox eye sunflower	1.25	1.42	0.09	1.38	1.90	4.77	1.14	1	1	1	1	4.27
d d 0.002 0.01 0.02 joil 0.13	pale purple coneflower	1	1	0.03	1	0.01	1	1	1	1	1	1	0.08
dd 0.01	partridge pea	1	1	1	0.02	0.01	1	1	1	1	1	1	'
ain clover - 0.13 - 0.53 0.40	pineapple weed	1	1	1	1	1	1	1	1	1	1	1	4.17
ain clover - 0.13 - 0.53 0.40	prairie cinquefoil	1	1	0.01	1	1	1	1	1	1	1	1	
ain clover - 0.01	prickly lettuce	1	0.13	1	0.53	0.40	1	1	1	1	1	1	Ċ
clover	prostrate vervain	1	0.01	1	ı	1	ı	1	1	1	1	1	·
see 5.81 3.53 - 0.21 0.02	purple prairie clover	'	1	1	1	'	1	1	'	'	'	'	0.03
5.81 3.53 - 0.21 0.02		1	ı	1	1	'	'	1	1	1	ı	1	
se 0.37 - 0.09 1.37	red clover	2 2 2	25 25		0.91	000							
se	rongh cinanefoil		50.5		1 1	0.0							0.56
tain mint 1.03 14.34 0.05 0.07 0.01 1.03 14.34 0.03 0.01 1.03 14.34 0.03 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.03 0.04 0.05	shorhords runso		000	1.37									
tain mint 0.03 0.01 0.01 0.01 0.01 0.01 0.01 0.01	suepueius puise	- 22	0.03	1.01	1 31	о П	2 2	ı	ı	ı	ı	ı	7 2
tain mint 0.03 0.01 0.01 0.03 14.34 0.03 9.91 1.09 12.45 15.12	Sillat (Weed	5.5	'	'	1.01	7.0	0.50	'	•	•	'	'	
tain mint 0.03	stiff goldenrod	1	1	1 0	1	1	0.01	1	1	1	1	1	'
tain mint 0.12	velvetleaf	1	1	0.03	1	1	1	1	1	1	1	1	
ster - 2.51 0.01 0.97 0.03 0.02 0.13	virginia mountain mint	1	1	1	0.12	1	1	1	1	1	1	1	'
over - 2.51 0.01 0.97 0.03 0.02 0.13	white clover	1.03	14.34	0.03	9.91	1.09	12.45	15.12	1	1	1	1	0.16
over - 2.51 0.01 0.97 0.03 0.02 0.13	white heath aster	1	1	ı	1	1	1	1	1	1	1	ı	
wer 3.07 2.38 2.87 5.12 7.88 8.60 4.31	white sweet clover	1	2.51	0.01	0.97	0.03	0.02	0.13	1	1	1	1	'
wer 3.07 2.38 2.87 5.12 7.88 8.60 4.31	wild bergamot	0.01	1	1	0.50	0.72	0.51	0.45	1	1	1	1	2.70
wer 3.07 2.38 2.87 5.12 7.88 8.60 4.31	wild mustard	•	1	1	1	'	'	•	1	•	1	1	'
wer 3.07 2.38 2.87 5.12 7.88 8.60 4.31 0.08 0.04 0.01 0.18	wild parsnip	0.01	1	1	1	1	1	1	1	1	ı	1	
lover 1.16 0.08 0.04 0.01 0.18	vellow coneflower	3.07	2.38	2.87	5.12	7.88	8.60	4.31	1	1	1	1	20.40
	vellow sweet clover	1 16			0 08	0.04	0.01	0 18					
Common Co	yellow sweet crover	71.	ı	1	000	1							

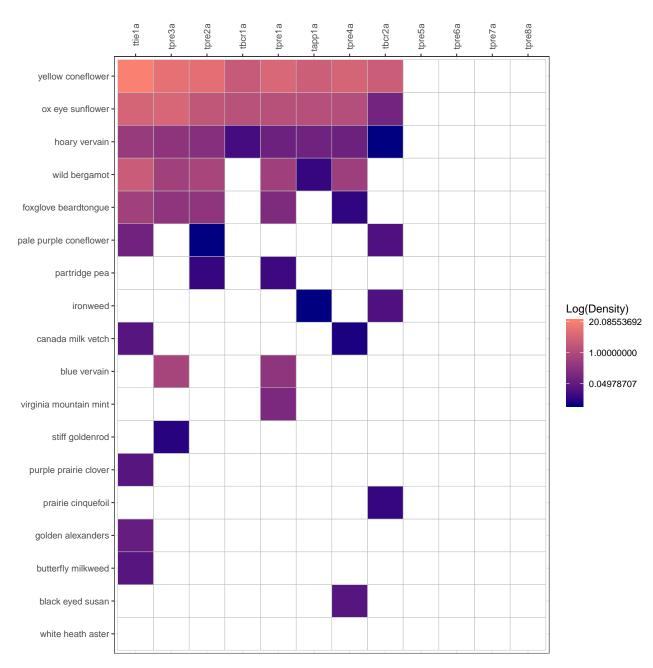


Figure 2: This plot is a heatmap for density of nectar species planted with transects on the columns and species on the rows sorting transects by average density and sorting species by average presence for year 2018.

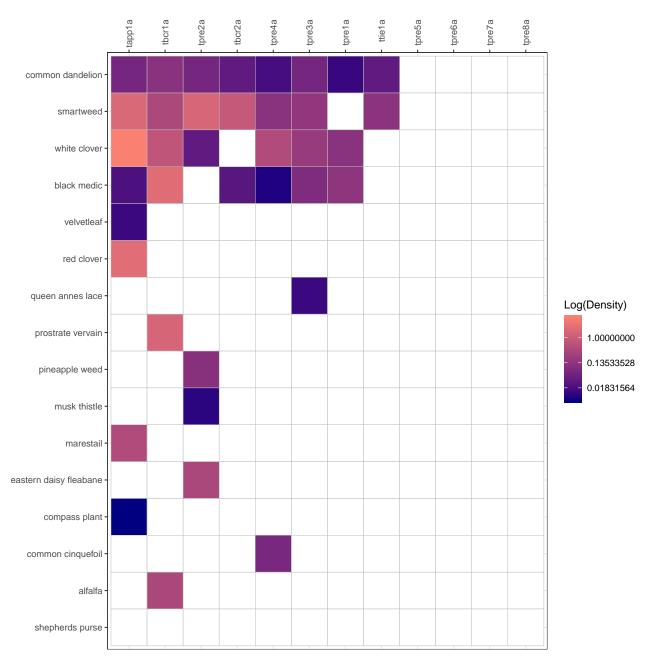


Figure 3: This plot is a heatmap for density of nectar species non planted with transects on the columns and species on the rows sorting transects by average density and sorting species by average presence for year 2017.

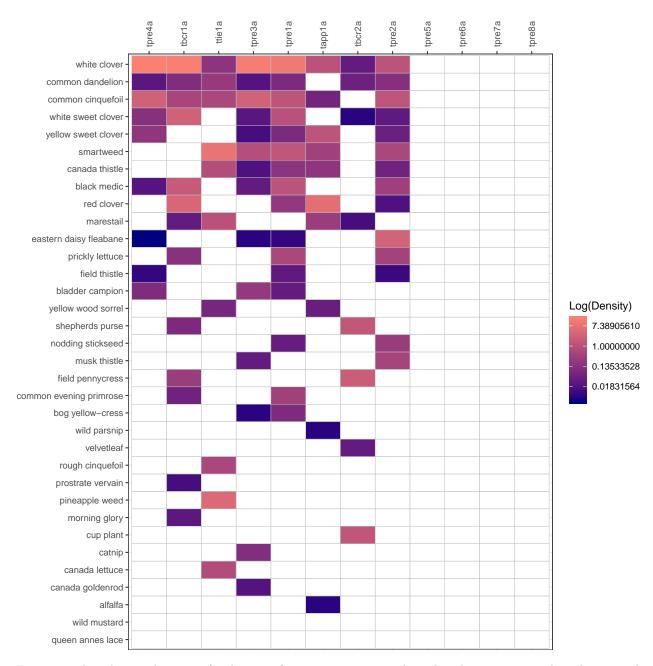


Figure 4: This plot is a heatmap for density of nectar species non planted with transects on the columns and species on the rows sorting transects by average density and sorting species by average presence for year 2018.

Table 7: 2017 ramet plant species: mean count across all surveys

Nectar Plant Species	tappla	therla	tbcr2a	tprela	tpre2a	tpre3a	tpre4a	tpre5a	tpre6a	tpre7a	tpre8a	ttiela
butterfly milkweed ramet	1		1					1			1	
common milkweed ramet			1	1	1	1		1	1		1	
swamp milkweed ramet				1	1	•	1	1	1	1	1	

Table 8: 2018 ramet plant species: mean count across all surveys

Nectar Plant Species	tappla	tbcrla	tbcr2a	tprela	tpre2a	tpre3a	tpre4a	tpre5a	tpre6a	tpre7a	tpre8a	ttiela
butterfly milkweed ramet		0.3	-		1			-				0.3
common milkweed ramet	0.3	1.3	0.3	0.7	1.0	5.3	0.3	0.7	1.0		0.7	0.7
swamp milkweed ramet	0.3	1	1	•	1	0.3	•	1	•	0.3	1	٠

Table 9: 2017 ramet plant species density: average density (count / m2) across all rounds

Nectar Plant Species	tapp1a	tbcrla	tbcr2a	tprela	tpre2a	tpre3a	tpre4a	tpre5a	tpre6a	tpre7a	tpre8a	ttiela
butterfly milkweed ramet	1	1	1	1			1	1	1	1	1	
common milkweed ramet	1	1	1	1	1	1	1	1	1	1	1	•
swamp milkweed ramet												

Table 10: 2018 ramet plant species density: average density (count / m2) across all rounds

Vectar Plant Species	tappla	tbcrla	tbcr2a	tprela	tpre2a	tpre3a	tpre4a	tpre5a	tpre6a	tpre7a	tpre8a	ttiela
outterfly milkweed ramet	•	0.01		,		,		•	1	1	•	0.01
ommon milkweed ramet	0.01	0.03	0.01	0.01	0.01	0.05	00.00	1	1	1	1	0.02
wamp milkweed ramet	0.01	1		1	1	0.00	1		1		1	

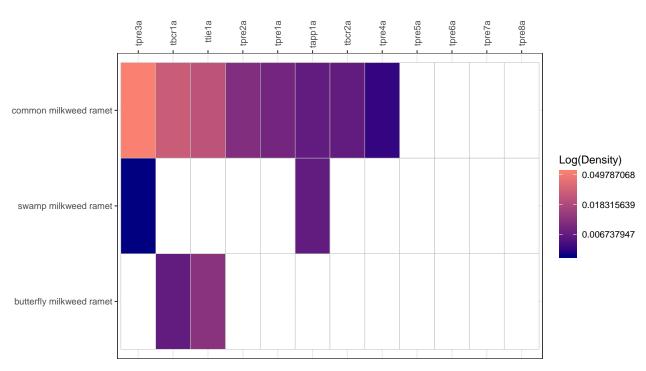


Figure 5: This plot is a heatmap for density of ramet species with transects on the columns and species on the rows sorting transects by average density and sorting species by average presence for year 2018.