

ISU Monarch Data Summary for NCIG

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Table 1 provides average land cover percentage averaged across all data collection events.

Table 1: Daubenmire: average land cover % across all rounds

transectID	cool season grass			warm season grass			forbs			milkweed			woody species			bare ground			leaf litter		
	2016	2017	2018	2016	2017	2018	2016	2017	2018	2016	2017	2018	2016	2017	2018	2016	2017	2018	2016	2017	2018
tall1a	48	10	26	3	0	0	47	77	80	0	0	0	0	0	0	9	46	24	42	20	25
tall2a	40	28	26	0	0	0	53	69	72	0	0	0	0	0	0	7	37	43	48	35	26
tapp1a	22	9	44	14	8	10	17	67	26	0	0	0	0	0	0	48	25	15	28	29	66
tarm1b	73	23	32	0	5	3	7	26	69	0	0	0	4	0	0	3	21	37	96	50	48
tarm2a	56	20	21	3	38	6	19	44	69	0	0	0	0	0	0	2	24	5	96	45	78
tbcrla	87	4	14	0	2	7	8	44	69	0	0	0	0	0	0	4	24	12	33	53	71
tbcrla	93	5	32	0	0	1	1	61	70	0	0	0	0	0	0	2	1	1	44	92	86
tber1a	14	20	35	18	14	4	53	40	42	0	0	0	0	0	0	52	27	29	25	57	31
tber3a	39	11	21	51	11	0	30	66	62	0	0	0	0	0	0	39	30	31	28	54	28
tbydl1a	70	3	8	0	27	0	30	40	90	0	0	0	0	0	0	3	3	17	66	38	40
tbydl2a	66	2	18	0	22	0	33	48	80	0	0	0	0	0	0	5	3	16	59	34	35
tcr1a	46	19	11	0	7	3	23	40	64	0	0	0	0	0	0	14	17	17	49	58	70
tcre1a	47	5	8	4	40	2	24	28	63	0	0	1	0	0	0	2	4	11	82	84	77
tdav1a	76	10	53	2	13	0	3	38	48	0	2	0	0	0	0	7	13	56	85	57	37
tdun2a	81	14	46	2	32	0	9	32	54	0	0	0	1	0	0	12	28	10	72	54	38
tdun3a	81	10	36	0	0	0	4	88	67	0	0	0	0	0	0	5	14	11	78	44	30
tfis1a	89	57	na	0	0	na	0	63	na	0	0	na	0	0	na	2	2	na	85	67	na
tgrola	70	15	49	5	1	0	24	80	44	1	0	1	0	0	0	16	19	20	60	57	73
tgro2a	71	1	15	7	0	0	27	91	81	0	0	0	0	0	0	19	20	27	64	47	60
thar1a	34	3	26	10	25	1	31	47	68	0	0	0	0	0	0	13	16	27	51	30	61
tjon1a	23	2	3	2	8	8	46	46	77	0	2	0	5	2	1	14	12	40	67	52	52
tniela	61	5	34	0	21	4	3	23	55	0	1	2	0	0	0	3	13	9	77	57	80
tnkn1a	53	21	23	0	1	2	16	62	83	0	0	0	0	0	0	7	40	11	77	38	70
tnkn2a	61	21	46	0	7	0	19	53	67	0	0	0	0	0	0	10	47	6	73	30	66
tnor1b	84	15	15	0	8	0	3	50	80	1	1	2	0	0	0	5	24	14	75	63	72
tpiol1a	52	50	75	28	14	3	11	13	14	0	2	1	0	0	0	8	10	6	73	71	46
tpio2a	59	19	66	12	12	2	3	45	43	0	0	0	0	0	0	8	14	19	86	67	28
tprd1a	63	8	43	13	54	40	0	9	15	0	0	0	0	0	0	1	8	5	84	80	45
tprd2a	53	46	76	18	12	10	5	26	23	0	0	0	0	0	0	1	2	8	89	87	62
tprela	69	0	8	22	0	0	27	92	79	0	0	0	0	0	0	3	50	7	53	27	20
tpre2a	91	1	15	1	0	0	12	64	72	0	0	0	0	0	0	1	14	4	61	74	21
tpre3a	71	1	5	1	1	0	24	82	78	0	0	0	0	0	0	2	34	1	76	45	33
tpre4a	71	0	11	16	0	0	16	74	85	0	0	0	0	0	0	6	37	2	80	46	19
tpre5a	70	0	7	0	1	0	31	73	85	0	0	0	0	0	0	2	22	2	67	60	23
tpre6a	74	6	46	2	4	0	15	58	53	0	0	0	0	0	0	26	30	12	62	60	4
tpre7a	78	2	6	0	0	0	42	88	92	0	0	0	0	0	0	2	27	8	46	45	15
tpre8a	64	0	14	21	0	0	30	70	86	0	0	0	0	0	0	7	17	1	64	65	15
tsut2a	0	3	3	0	0	3	86	57	66	0	0	0	0	0	0	78	78	50	0	9	8
ttiela	92	3	9	0	0	4	3	60	74	0	0	0	0	0	0	2	41	45	33	49	38
tuth3b	63	11	31	3	14	11	16	29	34	1	2	0	0	0	0	6	12	30	77	37	47
tvan1a	34	6	21	14	16	34	22	26	40	0	0	0	0	0	0	2	4	10	85	53	88
tver1a	12	5	9	4	16	16	69	52	78	0	0	0	0	1	1	33	18	32	28	64	51
tvos1a	33	0	9	1	0	3	3	27	76	0	0	0	0	0	0	2	35	67	92	64	27
Mean	59	12	26	6	10	4	22	53	64	0	0	0	0	0	0	11	22	19	63	52	45

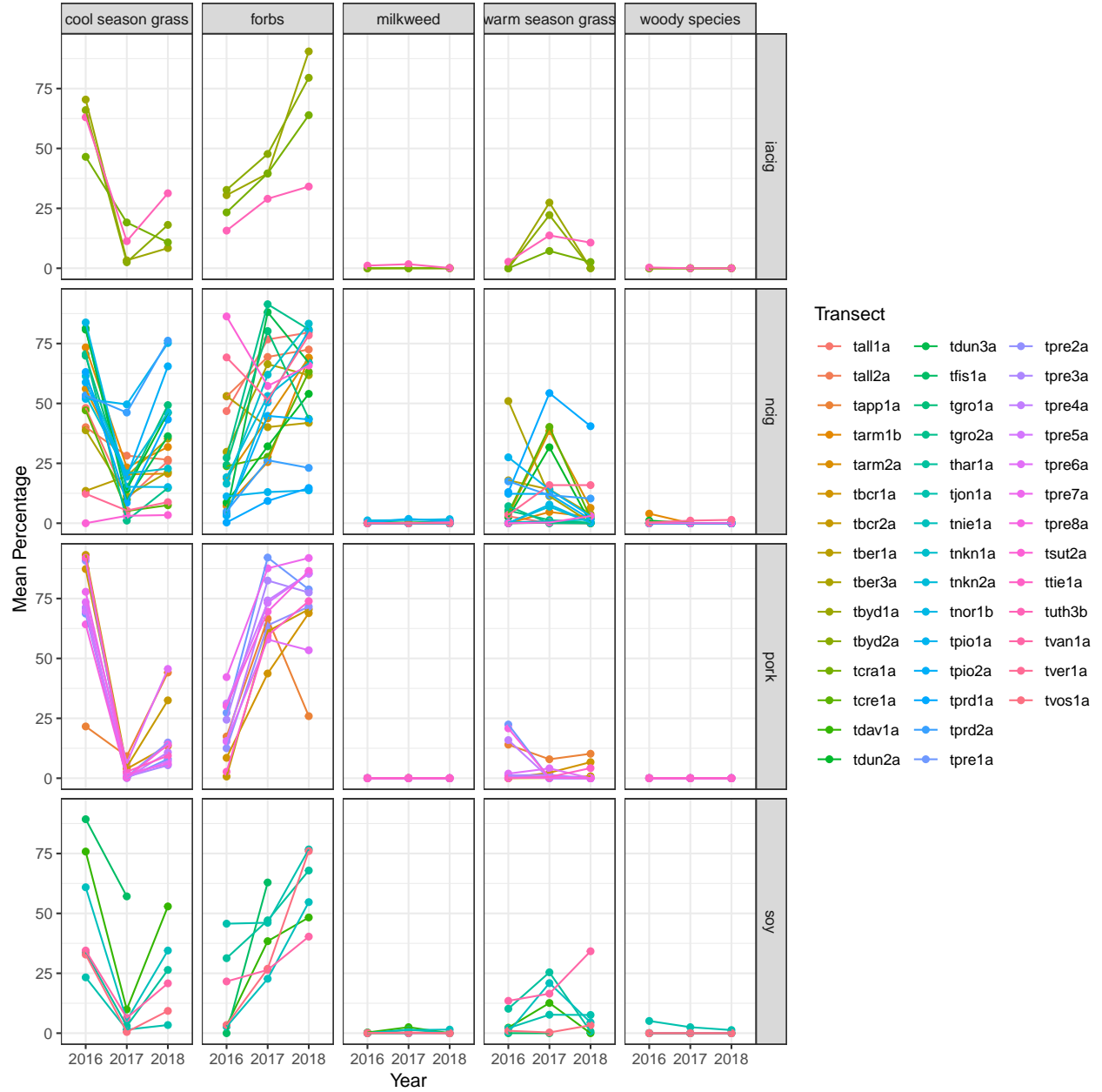


Figure 1: This plots the mean percentage of land cover by year and is faceted by class. The colors correspond to the different transects.

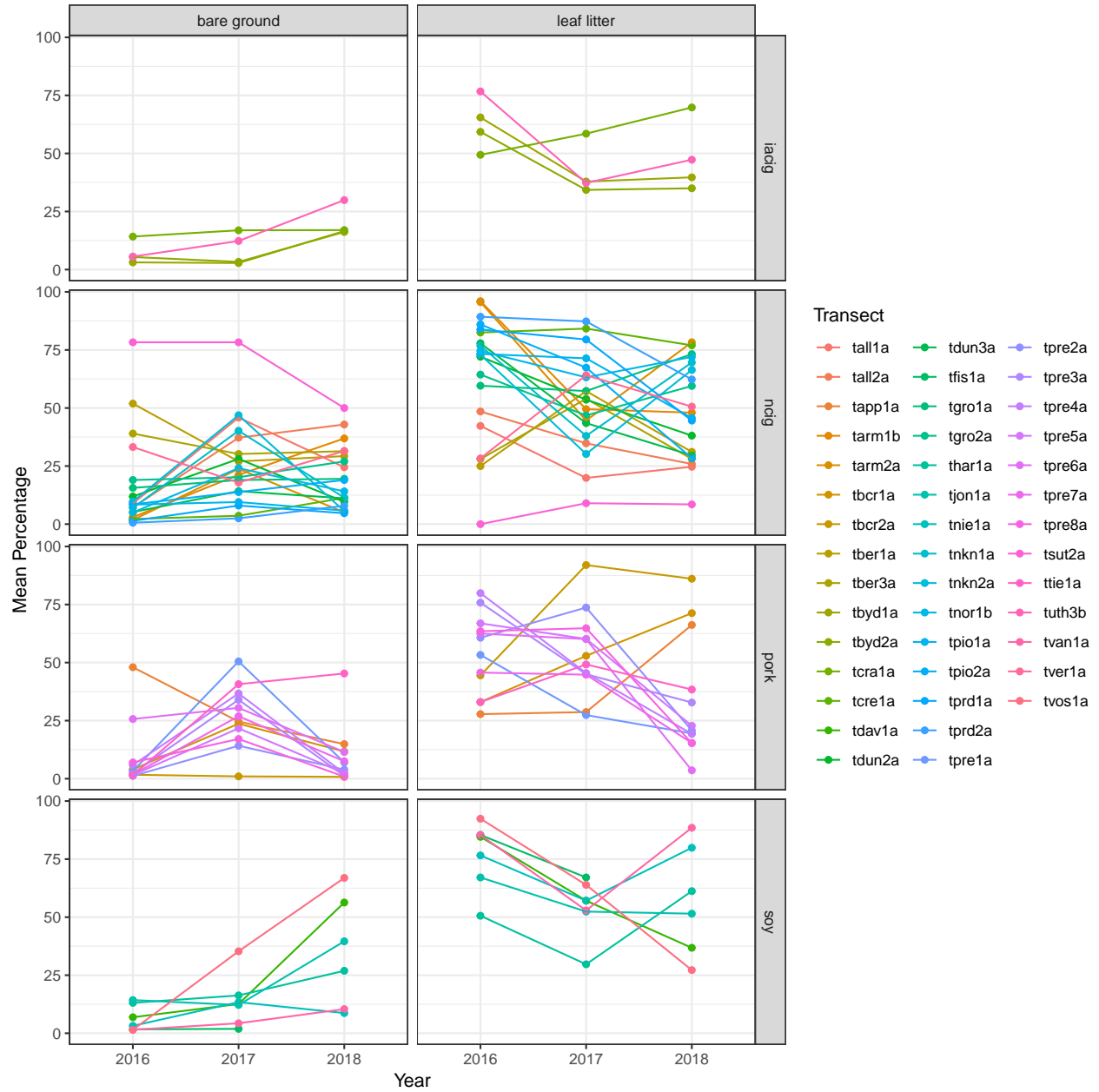


Figure 2: This plots the mean percentage of land cover by year and is faceted by class. The colors correspond to the different trassects.

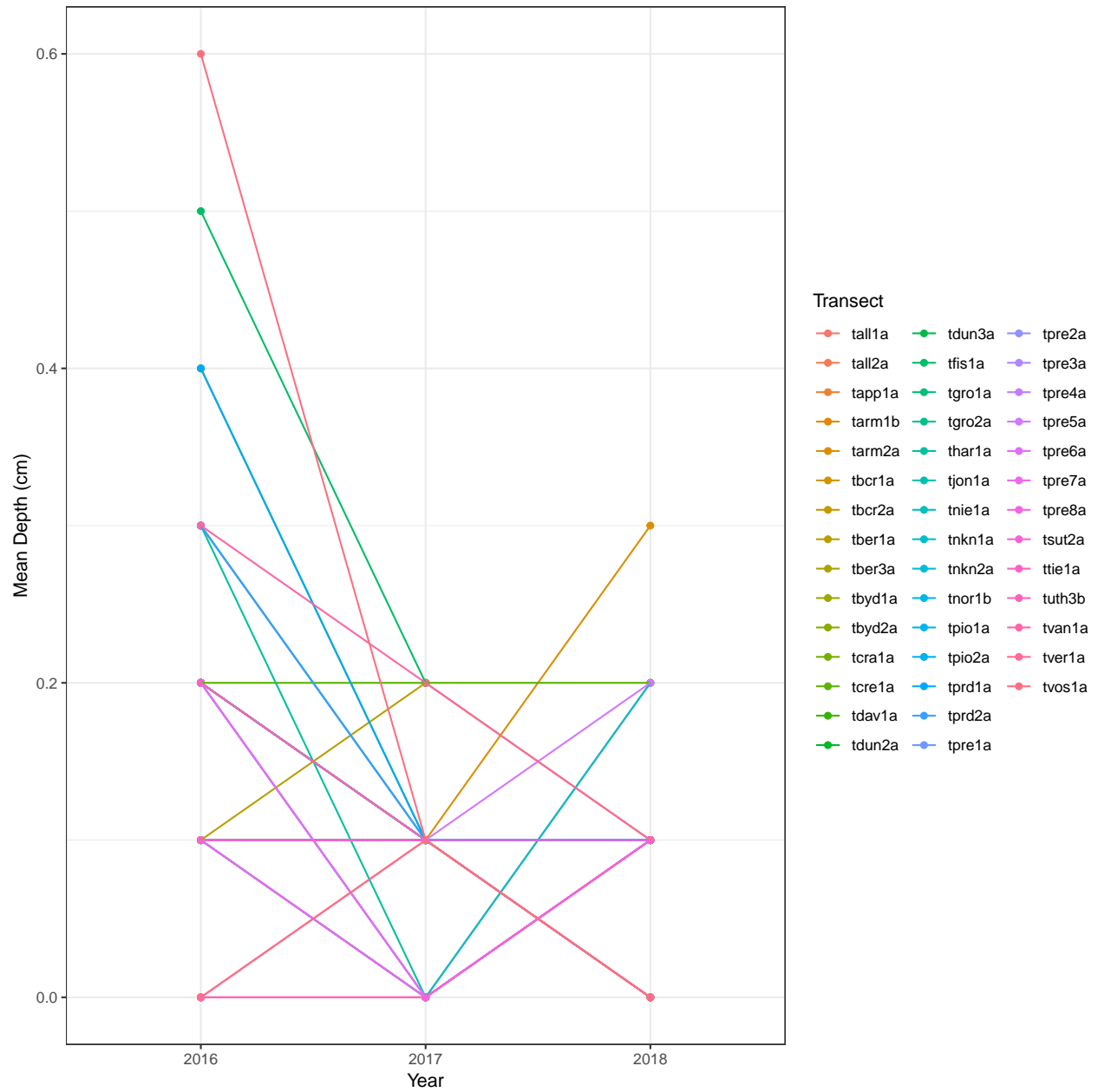


Figure 3: This plots the mean percentage of land cover by year and is faceted by class. The colors correspond to the different transects.

Table 2: Daubenmire Milkweed: average ramet stems across all rounds

transectID	butterfly ramet		common ramet		swamp ramet	
	2017	2018	2017	2018	2017	2018
tall1a	0.0	0.0	0.0	0.0	0.3	0.0
tall2a	0.0	0.0	0.0	0.0	0.0	0.0
tappl1a	0.0	0.0	0.1	0.0	0.0	0.0
tarm1b	0.0	0.0	0.0	0.0	0.0	0.1
tarm2a	0.0	0.0	0.0	0.0	0.1	0.0
tber1a	0.0	0.0	0.0	0.0	0.0	0.1
tber2a	0.0	0.0	0.0	0.0	0.0	0.0
tber1a	0.0	0.0	0.0	0.0	0.0	0.0
tber3a	0.0	0.0	0.0	0.0	0.0	0.0
tbyd1a	0.0	0.0	0.0	0.0	0.0	0.0
tbyd2a	0.0	0.0	0.0	0.0	0.0	0.0
tcr1a	0.0	0.0	0.0	0.0	0.0	0.0
tcre1a	0.0	0.0	0.0	0.0	0.0	0.0
tdav1a	0.0	0.0	0.8	0.0	0.0	0.0
tdun2a	0.0	0.0	0.0	0.0	0.0	0.0
tdun3a	0.0	0.0	0.0	0.0	0.0	0.0
tfis1a	0.0	na	0.0	na	0.0	na
tgro1a	0.0	0.0	0.1	0.2	0.0	0.0
tgro2a	0.0	0.0	0.0	0.0	0.0	0.0
thar1a	0.0	0.0	0.0	0.0	0.0	0.0
tjon1a	0.0	0.0	0.3	0.0	0.0	0.0
tniel1a	0.0	0.0	0.2	0.3	0.0	0.0
tnkn1a	0.0	0.0	0.0	0.0	0.0	0.0
tnkn2a	0.0	0.0	0.0	0.0	0.0	0.0
tnor1b	0.0	0.0	0.9	0.3	0.2	0.1
tpio1a	0.0	0.0	0.0	0.1	0.1	0.0
tpio2a	0.0	0.0	0.0	0.2	0.0	0.0
tprd1a	0.0	0.0	0.0	0.0	0.0	0.0
tprd2a	0.0	0.0	0.1	0.0	0.0	0.0
tpre1a	0.0	0.0	0.0	0.0	0.0	0.0
tpre2a	0.0	0.0	0.0	0.0	0.0	0.0
tpre3a	0.0	0.0	0.0	0.0	0.0	0.0
tpre4a	0.0	0.0	0.0	0.0	0.0	0.0
tpre5a	0.0	0.0	0.0	0.0	0.0	0.0
tpre6a	0.0	0.0	0.0	0.0	0.0	0.0
tpre7a	0.0	0.0	0.0	0.0	0.0	0.0
tpre8a	0.0	0.0	0.0	0.0	0.0	0.0
tsut2a	0.0	0.0	0.0	0.0	0.0	0.0
ttiel1a	0.0	0.0	0.0	0.0	0.0	0.0
tuth3b	0.0	0.0	0.6	0.1	0.0	0.0
tvan1a	0.0	0.0	0.0	0.0	0.0	0.0
tver1a	0.0	0.0	0.0	0.0	0.0	0.0
tvos1a	0.0	0.0	0.3	0.0	0.0	0.0
Mean	0.0	0.0	0.1	0.0	0.0	0.0

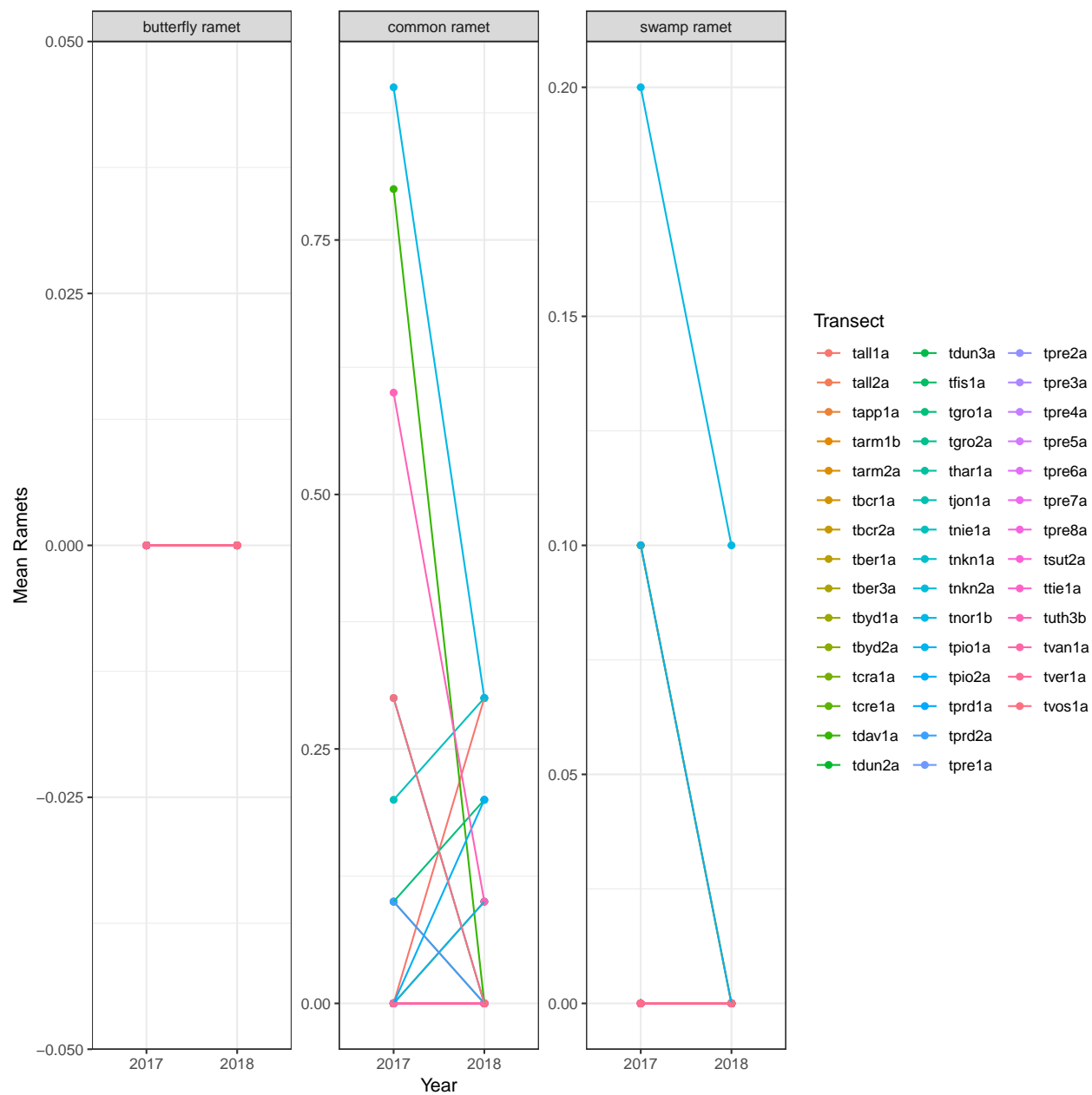


Figure 4: This plots the mean ramets by year and is faceted by species. The colors correspond to the different transects.