sheet D-H

RR 302

DENSITY AND HEIGHT GROWTH ALL PLOTS AND QUADRATS ALL EXAMINATIONS

August 15 1933
C.A. Hormay

DENSITY (tenths)

PLOT									Total	Av.
1 Bellview	Date		Feb 2	Feb 19	Mar 22	Apr. 11	Apr. 26	June 6	Total	Av.
		N	35	45	35	55	45	15	230 6	38
			50	50	45	50	45	15	255 6	43
		E	.60	60	60	35	30	30	275 6	46
			.75	.75	.80	80	80	75	465 6	78
		S	80	80	.70	.60	.17	.10	317 6	53
			85	85	.80	85	.65	.60	460 6	77
		W	50	40	35	35	30	.15	205 6	34
			60	60	60	70	35	.30	315 6	53
	Total		495 8	495 8	465 8	470 8	347 8	250 8	2522 8^6	420 8
	Average		62	62	58	59	43	31	315 6	53
2 Chase	Date		Feb. 5	Feb 23	Mar. 23	Apr. 17	May 3	June 6		
		N	.20	.25	.35	.45	30	.25	180 6	
		E	.35	.30	.45	.60	35	25	230 6	
		S	.50	—	60	60	.50	.30	250 5	
		W	.50	50	55	70	35	35	295 6	
	Total		155 4	105 3	195 4	235 4	150 4	115 4	955 4	
	Average		39	35	49	59	38	29	239 6	42
3 Williams	Date			Feb. 21	Mar. 21	Apr. 14	May 3	June 7		
		N		.15	.25	.45	.35	20	140 5	
		E		.20	.30	.25	.25	25	175 5	
		S		20	30	20	25	25	120 5	
		W		30	40	20	25	25	140 5	
	Total			85 4	125 4	110 4	110 4	95 4	525 4^5	105
	Average			21	31	28	28	24	131	26
4 Gan-Dennis	Date			Feb 26	Mar 15	Apr. 18	Apr. 28	June 9		
		N		.05	.05	.15	.15	.10	50 5	
		E		15	15	30	20	.08	88 5	
		S		25	25	65	60	50	225 5	
		W		25	40	75	55	75	270 5	
	Total			70 4	85 4	185 4	150 4	143 4	633 4^5	127
	Average			18	21	46	38	36	158	32
500	Total		6.50 12	7.55 19	8.70 20	10.00 20	7.57 20	6.03 20	4635	
	Average		.54	.40	.44	.50	.38	.30	Σ→ (256)	43
	Av. date		Feb 3	Feb 22	Mar 20	APR 15	APR 30	June 7		
5 R.R. Xing	Date		Feb 4	Feb 20	Mar 18	Apr. 15	Apr. 27	June 6		
		N	10	20	30	.35	20	10	175 6	
		E	50	50	65	85	65	60	375 6	
		S	20	25	30	25	20	10	130 6	
		W	40	30	45	50	30	15	210 6	
	Total		120 4	125 4	170 4	195 4	135 4	95 4	840 4^6	140
	Average		30	31	43	49	34	24	210	35
6 Jones	Date		Feb 6	Feb 23	Mar 23	Apr. 17	May 3	June 6		
		N	15	25	25	50	45	25	185 6	
		E	50	60	60	65	35	35	305 6	
		S	50	60	65	50	40	40	305 6	
		W	60	65	65	65	50	40	345 6	
	Total		175 4	210 4	215 4	230 4	170 4	140 4	1140 4^6	190
	Average		44	53	54	58	43	35	285	48
7 Big Hill	Date		Jan 30	Feb 20	Mar. 20	Apr. 13	May 4	June 7		
		N	15	15	40	40	20	20	150 6	
			10	15	40	45	25	30	165 6	
		E	30	35	50	45	45	35	240 6	
			15	20	50	30	35	30	180 6	
		S	30	35	50	55	45	45	260 6	
			20	25	60	55	45	55	260 6	
		W	20	25	30	50	45	40	210 6	
			.10	15	20	25	25	25	120 6	
	Total		150 8	185 8	340 8	345 8	285 8	280 8	1585 8^6	264
	Average		19	23	43	43	36	35	199 (48)	33
8 Philipini	Date			Feb 25	Mar. 24	Apr. 18	Apr. 28	June 9		
		N		10	15	20	20	30	95 5	
		E		30	30	35	50	70	215 5	
		S		60	60	55	65	.80	320 5	
		W		40	60	45	45	.70	260 5	
	Total			140 4	165 4	155 4	180 4	250 4	890 4^5	178
	Average			35	41	39	45	63	223 (20)	45
1000	Total		445 16	660 20	890 20	975 20	770 20	765 20	4455	
	Average		.28	.33	.45	.46	.39	.38	Σ→ (229)	38
	Height × Dens.		.137	.201	.671	1.720	1.743	2.147		
	Av Date		FEB 4	FEB 22	Mar 21	APR 16	May 1	June 7		
		+35	49	55	1.02	2.07	2.09	2.50		
9 Brownell	Date		Feb 2	Feb 22	Mar. 22	Apr. 14	Apr. 28	June 12		
		N	20	—	25	30	25	35	135 5	
		E	50	55	45	60	40	45	295 6	
		S	70	—	75	80	70	65	360 5	
		W	25	35	30	45	25	30	190 6	
	Total		165 4	90 2	175 4	215 4	160 4	175 4	980 4^6	163
	Average		41	45	44	54	40	44	245 (22)	45
10 Fredericks	Date		Feb 6	Feb 23	Mar. 23	Apr. 16	May 2	June 6		
		N	05	15	25	35	30	20	130 6	
		E	20	30	30	50	35	20	185 6	
		S	40	35	40	50	50	30	245 6	
		W	20	20	25	65	45	35	210 6	
	Total		85 4	100 4	120 4	200 4	160 4	105 4	770 4^6	128
	Average		21	25	30	50	40	26	193	32
11 Rosasco	Date			Feb 21	Mar. 21	Apr. 13	May 4	June 7		
		E		.50	70	75	70	70	335 5	
		S		50	.80	.75	65	70	340 5	
		W		50	65	65	55	70	305 5	
	Total			155 4	225 4	285 4	250 4	270 4	1185 4^5	237
	Average			39	56	71	63	68	296	59
12 Donovan	Date			Feb 25	Mar. 24	April 18	Apr. 29	June 9		
		N		10	25	35	40	50	160 5	
		E		50	60	60	60	75	305 5	
		S		50	70	65	65	70	320 5	
		W		40	60	75	70	70	315 5	
	Total			150 4	215 4	235 4	235 4	265 4	1100 4^5	220
	Average			38	54	59	59	66	275	55
1500	Total		250 8	495 14	735 16	935 16	805 16	815 16	4035	
	Average		.31	.35	.46	.58	.50	.51	Σ→ 271	45
	AV DATE		FEB 4	FEB 23	Mar 23	APR 15	MAY 1	June 9		
13 Fine Gold	Date			Feb 21	Mar 19	Apr. 13	May 2	June 12		
		N		05	20	35	.25	30	115 5	
		E		50	35	65	40	60	250 5	
		S		40	45	60	50	35	230 5	
		W		35	50	60	50	50	245 5	
	Total			130 4	150 4	220 4	165 4	175 4	840 4^5	168
	Average			33	38	55	41	44	210	42
14 Mariposa	Date			Feb 24	Mar 23	Apr. 16	May 2	June 6		
		N		T	.10	.25	.35	.35	105 5	
		E		10	20	30	30	45	135 5	
		S		20	25	30	35	35	145 5	
		W		10	20	30	40	50	150 5	
	Total			40 4	75 4	115 4	140 4	165 4	535 4^5	107
	Average			10	19	29	35	41	134	27
15 Curtis Crk.	Date			Feb 22	Mar 22	Apr. 15	May 5	June 8		
		N		.03	.08	.08	.10	.12	41 5	
				.03	.05	07	.15	.10	40 5	
		E		.10	30	25	35	40	140 5	
				.05	.10	30	20	10	75 5	
		S		08	15	10	20	10	63 5	
				45	50	35	35	40	205 5	
		W		10	10	20	30	40	110 5	
				25	45	40	35	50	195 5	
	Total			109 8	173 8	175 8	200 8	212 8	869 8^5	174
	Average			14	22	22	25	27	109	22
2000	Total			279 16	398 16	510 16	505 16	552 16	2244	
	Average			.17	.25	.32	.32	.35	→ 141	28
	AV DATE			FEB 22	Mar 21	APR 15	May 3	June 9		
16 Clark	Date			Mar 5	Mar. 21	Apr. 12	May 6	June 12		
		N		T	10	10	20	70	110 5	
				T	.03	15	20	30	68 5	
		E		10	15	25	15	15	80 5	
				.05	55	55	20	10	145 5	
		S		20	25	30	25	50	150 5	
				.05	45	70	50	40	210 5	
		W		.08	25	45	30	20	128 5	
				.01	40	65	35	35	176 5	
	Total			49 8	218 8	315 8	215 8	270 8	1067 8^5	213
	Average			6	27	39	27	34	133	27
17 Baldwin	Date			Feb 23	Mar. 23	Apr. 17	May 6	June 8		
		N		25	30	30	40	50	175 5	
		E		10	25	30	35	50	150 5	
		S		35	45	40	60	60	240 5	
		W		15	25	25	30	40	135 5	
	Total			85 4	125 4	125 4	165 4	200 4	700 4^5	140
	Average			21	31	31	41	50	175	35
2500	Total			134 12	343 12	440 12	380 12	470 12	1767	
	Average			.11	.29	.37	.32	.39	148	30
	AV DATE			FEB 27	Mar 22	Apr 15	May 6	June 10		
GRAND	TOTAL		1345 36	2323 81	3236 84	3810 84	3217 84	3205 84	171.36 453	
GRAND AVERAGE			.37 33	.29	.39	.45	.38	.38	Σ→ 222	.37

HEIGHT (inches)

PLOT									Total	Av.
500 FT										
1 Bellview			Feb. 2	Feb 19	Mar. 22	April 11	Apr. 26	June 6	Total	Av.
		N	0.50	0.50	1.00	3.00	5.50	4.00	14.50 6	
			.25	38	.75	3.00	3.00	3.25	10.63 6	
		E	.38	38	1.50	3.00	3.50	3.50	12.26 6	
			.25	.50	2.00	3.00	3.50	4.00	13.25 6	
		S	.12	.25	1.00	5.00	4.00	4.00	14.37 6	
			.38	.75	1.50	4.00	3.50	3.00	13.13 6	
		W	.25	.25	1.50	4.00	4.00	4.00	14.00 6	
			.12	.25	1.00	3.00	4.00	5.00	13.37 6	
	Total		2.25 8	3.26 8	10.25 8	28.00 8	31.00 8	30.75 8	105.51 8^6	17.59
	Average		.28	.41	1.28	3.50	3.88	3.84	13.19	
2 Chase			Feb. 5	Feb 23	Mar. 23	April 17	May 3	June 6		
		N	.50	.75	1.50	6.00	3.00	4.00	15.75 6	
		E	.50	1.00	3.00	6.00	4.00	6.00	20.50 6	
		S	.42	.70	2.00	5.00	4.00	7.00	19.12 6	
		W	.68	.80	2.00	8.00	3.00	7.00	21.48 6	
	Total		2.10 4	3.25 4	8.50 4	25.00 4	14.00 4	24.00 4	76.85 4^6	
	Average		.53	.81	2.13	6.25	3.50	6.00	19.21	
3 Williams				Feb. 21	Mar. 21	April 14	May 3	June 7		
		N		.50	.75	2.50	3.00	3.50	10.25 5	
		E		.38	1.50	2.50	3.00	2.50	9.88 5	
		S		.38	1.25	2.00	2.50	4.00	10.13 5	
		W		38	1.25	2.00	3.00	2.50	9.13 5	
	Total			1.64 4	4.75 4	9.00 4	11.50 4	12.50 4	39.39 4^5	
	Average			.41	1.19	2.25	2.88	3.13	9.85	
4 Gan-Dennis				Feb 26	Mar. 15	Apr. 18	Apr. 28	June 9		
		N		50	.50	.75	2.00	3.00	6.75 5	
		E		1.00	1.25	2.00	2.00	1.00	7.25 5	
		S		1.00	1.25	7.00	6.00	8.00	23.25 5	
		W		75	1.25	8.00	8.00	10.00	28.00 5	
	Total			3.25 4	4.25 4	17.75 4	18.00 4	22.00 4	65.25 4^5	
	Average			.81	1.06	4.44	4.50	5.50	16.31	
500	Total		4.35 12	11.40 20	27.75 20	79.75 20	74.50 20	89.75 20	287.00 20	
	Average		.36	.57	1.39	3.66	3.73	4.46	14.35 ÷ 6 = 2.4	
	Av. date		Feb 3	Feb 22	Mar 20	Apr. 15	Apr. 30	June 7		
1000 FT										
5 R.R. Xing			Feb. 4	Feb 20	Mar. 18	Apr. 15	Ap. 27	June 6		
		N	.38	.60	1.90	5.00	4.00	4.50	16.38 6	
		E	.66	73	2.30	7.00	6.00	6.00	22.69 6	
		S	.42	45	2.25	3.00	5.00	4.00	15.12 6	
		W	.30	.25	1.65	3.00	2.00	2.00	9.20 6	
	Total		1.76 4	2.03 4	8.10 4	18.00 4	17.00 4	16.50 4	63.39 4^6	
	Average		.44	.51	2.03	4.50	4.25	4.13	15.85	
6 Jones			Feb 6	Feb 23	Mar 23	Apr. 17	May 3	June 6		
		N	.70	1.50	3.00	8.00	4.00	6.00	23.20 6	
		E	35	.80	2.50	8.00	7.00	7.00	25.65 6	
		S	30	.85	2.50	5.00	2.50	4.00	15.15 6	
		W	.30	.60	1.50	7.00	5.00	6.00	20.40 6	
	Total		1.65 4	3.75 4	9.50 4	28.00 4	18.50 4	23.00 4	84.40 4^6	
	Average		.41	.94	2.38	7.00	4.63	5.75	21.10	
7 Big Hill			Jan 30	Feb 20	Mar. 20	Apr. 13	May 4	June 7		
		N	.50	.50	1.00	2.00	5.00	6.00	15.00 6	
			50	50	1.00	2.00	5.00	7.00	16.00 6	
		E	50	50	.75	2.00	4.00	3.00	10.75 6	
			.63	75	1.00	3.00	—	7.00	12.38 5	
		S	.50	50	.75	2.00	5.00	5.00	13.75 6	
			.75	.75	1.25	3.00	5.50	8.00	19.25 6	
		W	.50	.50	1.00	1.75	2.50	6.00	12.25 6	
			50	50	1.00	2.00	3.50	6.00	13.50 6	
	Total		4.38 8	4.50 8	7.75 8	17.75 8	30.50 7	48.00 8	112.88 8^6 (48)	
	Average		55	56	97	2.22	436	6.00	14.11	
8 Philipini				Feb 25	Mar. 24	Apr. 18	Apr. 28	June 9		
		N		.50	.75	1.50	4.00	4.50	11.25 5	
		E		.75	2.00	4.00	5.00	9.00	20.75 5	
		S		.38	.75	3.00	5.00	5.00	14.13 5	
		W		.38	1.00	2.50	5.00	7.00	15.88 5	
	Total			2.01 4	4.50 4	11.00 4	19.00 4	25.50 4	62.01 4^5	
	Average			.50	1.13	2.75	4.75	6.38	15.50	
1000	Total		7.79 16	12.29 20	29.85 20	74.75 20	85.00 19	113.00 20	322.68 20	
	Average		.49	0.61	1.49	3.74	4.47	5.65	16.13 ÷ 6 = 2.7	
	Av. Date		Feb 4	Feb 22	Mar 21	APR 16	May 1	June 7		
1500 FT										
9 Brownell			Feb 2	Feb 22	Mar. 22	Apr. 14	Apr. 28	June 12		
		N	.50	—	2.00	3.50	5.00	5.00	16.00 5	3.20
		E	1.00	1.00	—	4.00	8.00	10.00	24.00 5	4.80
		S	.42	—	—	4.00	4.50	5.00	13.92 4	3.48
		W	—	—	—	4.00	4.50	5.00	13.50 3	4.50
	Total		1.92 3	1.00 1	2.00 1	15.50 4	22.00 4	25.00 4	67.42 4^6 (18)	12.90
	Average		.64	1.00	2.00	3.90	5.50	6.25	16.86	
10 Fredericks			Feb 6	Feb 23	Mar. 23	Apr. 16	May 2	June 6		
		N	.14	.72	.50	3.50	3.00	4.00	11.36 6	
		E	—	.30	—	2.50	3.00	2.00	7.80 4	
		S	.42	58	1.00	4.00	3.00	3.00	12.00 6	
		W	.30	.30	50	4.00	6.00	8.00	19.10 6	
	Total		.86 3	1.40 4	2.00 3	14.00 4	15.00 4	17.00 4	50.26 4^6 (22)	
	Average		.29	.35	.67	3.50	3.75	4.25	12.57	
11 Rosasco				Feb 21	Mar. 21	Apr. 13	May 4	June 7		
		E		.75	1.50	4.50	6.50	9.00	22.25 5	
		S		.63	1.00	4.00	5.00	7.00	17.63 5	
		W		50	1.00	2.50	6.00	6.00	16.00 5	
	Total			2.13 4	4.50 4	13.50 4	17.50 4	29.00 4	66.63 4^5 (18)	
	Average			.53	1.13	3.38	4.38	7.25	16.66	
12 Donovan				Feb 25	Mar. 24	April 18	April 29	June 9		
		N		.25	50	2.00	3.50	4.00	10.25 5	
		E		.25	.50	2.50	4.00	4.00	11.25 5	
		S		.25	50	3.25	5.00	4.00	13.00 5	
		W		.38	50	3.00	5.00	5.00	13.88 5	
	Total			1.13 4	2.00 4	10.75 4	17.50 4	17.00 4	48.38 4^5	
	Average			.28	.50	2.69	4.38	4.25	12.10	
1500	Total		2.78 6	5.66 13	10.50 12	53.75 16	72.00 16	88.00 16	232.69 6	
	Average		.46	.44	.88	3.36	4.50	5.50	14.54 ÷ 6 2.4	
	AV DATE		Feb 4	Feb 23	Mar 23	APR 15	May 1	June 9		
2000 FT										
13 Fine Gold				Feb 21	Mar. 19	Apr. 13	May 2	June 12		
		N		2.00	1.25	2.50	6.00	8.00	19.75 5	
		E		.25	—	2.50	3.50	5.00	11.25 5	
		S		.25	.50	3.00	3.00	4.00	10.25 5	
		W		.75	—	3.00	4.00	6.00	13.75 5	
	Total			3.25 4	1.75 2	11.00 4	16.50 4	23.00 4	55.50 4^5 (18)	
	Average			.81	.88	2.75	4.13	5.75	13.88	
14 Mariposa				Feb 24	Mar. 23	Apr 16	May 2	June 6		
		N		.80	.25	2.00	4.00	5.00	12.05 5	
		E		.30	.75	2.50	4.00	8.00	15.55 5	
		S		.37	50	1.50	2.50	7.00	11.87 5	
		W		.40	38	1.50	3.50	7.00	12.78 5	
	Total			1.87 4	1.88 4	7.50 4	14.00 4	27.00 4	52.25 4^5	
	Average			.48	.47	1.88	3.50	6.75	13.06	
15 Curtis Crk.				Feb 22	Mar. 22	Apr. 15	May 5	June 8		
		N		1.00	1.25	7.25	—	—	9.50 3	
				1.00	1.00	1.25	2.50	1.50	7.25 5	
		E		.50	1.00	3.00	5.00	5.00	14.50 5	
				.50	1.00	2.00	4.00	1.00	8.50 5	
		S		.50	1.00	2.50	3.50	2.00	9.50 5	
				.38	.75	2.00	2.00	2.50	7.63 5	
		W		.50	.75	2.00	4.00	4.00	11.25 5	
				.50	1.00	3.50	4.00	3.00	12.00 5	
	Total			4.88 8	7.75 8	23.50 8	25.00 7	19.00 7	80.13 8^5 (28)	
	Average			.61	.97	2.94	3.5	2.71	10.02	
2000	Total			10.00 16	11.38 14	42.00 16	55.50 15	69.00 15	187.88	
	Average			.63	.81	2.63	3.70	4.61	Σ→ 12.35 / 5	2.5
	AV DATE			Feb 22	Mar 21	Apr 15	May 3	June 9		
2500 FT										
16 Clark				Mar. 5	Mar. 21	Apr. 12	May 6	June 12		
		N		.13	.75	1.50	2.50	8.00	12.88 5	
				—	—	2.00	4.00	6.00	12.00 3	
		E		.25	1.00	2.00	4.00	6.00	13.25 5	
				.13	—	1.00	1.50	1.50	4.13 4	
		S		.38	.50	1.50	3.00	6.00	11.38 5	
				.25	.50	2.00	4.50	6.00	13.25 5	
		W		.38	.75	1.50	4.00	6.00	12.63 5	
				.13	.50	2.00	3.50	4.50	10.63 5	
	Total			1.65 7	4.00 6	13.50 8	27.00 8	44.00 8	90.15 8^5 (37)	
	Average			.24	.67	1.69	3.38	5.50	11.27	
17 Baldwin				Feb 23	Mar. 23	Apr. 17	May 6	June 8		
		N		.13	.50	1.25	3.50	3.50	8.88 5	
		E		.25	1.00	1.50	1.75	6.00	10.50 5	
		S		.38	.75	1.00	2.00	4.00	8.13 5	
		W		.25	.50	1.25	1.50	6.00	9.50 5	
	Total			1.01 4	2.75 4	5.00 4	8.75 4	19.50 4	37.01 4^5	
	Average			.25	.69	1.25	2.19	4.88	9.25	
2500	Total			2.66 11	6.75 10	18.50 12	35.75 12	63.50 12	127.16	
	Average			.24	.68	1.54	2.98	5.29	10.73 / 5	2.1
	AV DATE			Feb 27	Mar 22	Apr 15	May 6	June 10		
GRAND	TOTAL		14.92 34	47.01 80	86.23 76	268.75 84	322.75 82	422.75 83	1157.41	
GRAND AVERAGE			.44	.53	1.13	3.20	3.94	5.09	Σ→ 14.33 / 6	2.4

VOLUME PRODUCTION

Density x height
all plot and quadrats
all examinations

Date	Feb 3	Feb 22	Mar 21	Apr 15	May 1	June 8
Density x height =	.16	.15	.44	1.44	1.50	1.93

A Σ Plots 1,2,5,6,7,9,&10 exclusive of first examination	1310 33	1680 36	1890 36	1407 36	1160 36	7447/177
B Total for Σ all plots exclusive of first exam.						15791/417

B	15791	417	Av .38
A	7447	177	Av = .42
Total for Σ plots 3,4,8,11, 12,13,14,15,16,&17) →	8344	240	Av .35

$\frac{37}{42} :: \frac{x}{.35} = 33$ = adjusted value for GRAND AVERAGE for density First examination (Feb 3).