FRUIT PRODUCTION

Introduction

Fruit production is influenced by such factors as weather, soil type, and cover type, and may affect fruit predator populations. To

production of thirteen common fleshy-fruiting species found on 20 subquadrats throughout the forest. This census method indicates peak and trough years of these species, but does not quantify finer scale patterns.

Site Selection and Layout

The twenty sample subquadrats are paired: ten of the sites are

fruits of Maianthemumcanadense, Gaylussacia baccata, and possibly Mitchella repens are usually still green but mostly developed. Virtually all fruits of these species that are green at this time reach maturity. Also at this time, presence of flowers on remaining species is noted to facilitate locating their fruits in the third census.

- The third census, conducted at the end of August, should capture the Rubus species, Ilex verticillata, Medeola virginiana, Viburnum acerifolium, and possibly Mitchella repens if it wasn't fruiting in July.

Procedure

1. Print out the data sheets for each subquadrat. Each data sheet has starting points in meters for transects in that subquadrat (Figure 3-28). Print or photocopy a map of the study area with subquadrat fruit production transect lines, and plan a route (Figure 3-29).
2. At each subquad, start at the northernmost or southern-most transect, census the length of it, and come back censusing the next transect, until all transects have been censused in a weaving fashion.
3. Do the census

Evaluation

This method was adapted from a master's thesis project conducted at HRF by Andrew Whitman and represents a continuation of his three years of data collection. Changes to his methods include standardizing the search area to a 2m-wide strip and dropping uncommon fruiting species from the study.

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Table 3–15. Sample locations of fruit production transects and ceptometer sampling points along transects.

Subquadrat	Transect (dist. from n. edge of subquadrat) (m)	Ceptometer sampling points (distance from west end of transect) (m)	(m)	(m)
3E31	1	3	16	17
	9	6	16	24
	11	6	12	21
	20	2	16	21
	22	5	16	20
3G23	3	11	21	
	9	8	12	21
	14	1	12	23
	20	5	10	22
	22	8	12	20
3J41	5	3	13	23
	8	1	10	23
	12	1	11	20
	17	6	14	17
	21	4	15	24
4F41	1	5	9	24
	6	6	12	18
	11	1	12	24
	19	3	14	20
	23	2	13	23
4G31	2	2	15	17
	7	3	12	22
	11	6	9	20
	19	7	16	19
	25	5	15	17
4G41	5	1	13	22
	10	3	11	19
	13	2	12	19
	19	6	11	18
	23	2	11	22
4I43	1	4	14	20
	10	8	13	24
	15	2	16	20
	20	6	16	24
	22	6	9	24
5E41	2	1	12	20
	6	8	14	20
	14	5	15	20
	17	1	13	20
	21	8	13	19

Figure 3–28. Fruit production transects subquad data sheet.

HOLT RESEARCH FOREST
FRUIT PRODUCTION TRANSECTS
SUBQUAD DATA SHEET

Year 92 Observer JWW Weather clear warm

SUBQUAD 4F41	NUMBER OF FRUIT					
Transect Location	1m	6m	11m	19m	23m	

Figure 3–29. Map of fruit production transects.