

ARTHROPOD MONITORING: MOSQUITO STUDIES:

Mosquito Studies - Survey of Upland Sites - Greenwoods

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Two upland areas of the Greenwoods Conservancy sites were surveyed for mosquito populations. A series of six sampling sites was established along the Snipe Hill Trail between the town road and the Beaver Pond, and a series of six sampling sites was established on the lower end of the High Fields trail, the northern margin of the high fields and below this trail. Series of collections were attempted by sitting for twenty minutes at each of the sites and collecting all adult mosquitoes. Collections were made by inverting small killing vials over alighting mosquitoes.

The Snipe Hill and High Fields sites were sampled as separate series, with some collections made in early morning and others in late evening. Some variation was made in the sequence of sites visited within each sampling route on different occasions. Table 1 lists the dates, time and sequence of site visitations for all collections during the summer of 1996.

The small number of mosquitoes collected is indicative of the low population levels of anthropophilic species in this area. (See Table 2) The major portion of the specimens collected are typical of the univoltine "Northern Aedes" type of developmental sequence that has been the dominant feature of populations in those areas of Greenwoods that have been surveyed previously (See Figure 1). With the exception of *Coquillettidia perturbans* (Walker), none of the species collected is confined to permanent water habitats. The collection of several specimens of *Anopheles punctipennis* (Say)¹ on both the High Fields and Snipe Hill circuits in late summer may indicate a permanent source of development nearby (although this species develops in a variety of aquatic habitats). Overall, however, permanent water mosquitoes do not appear to be an important part of the local population, notwithstanding the extensive area of impoundments made by beavers.

¹All specimens are believed to represent this species although some more closely resemble *Anopheles perplexus* Ludlow. The apparent rather limited requirements for larval development of this species and the difficulty in separating adult specimens of the two species was considered in the determination.

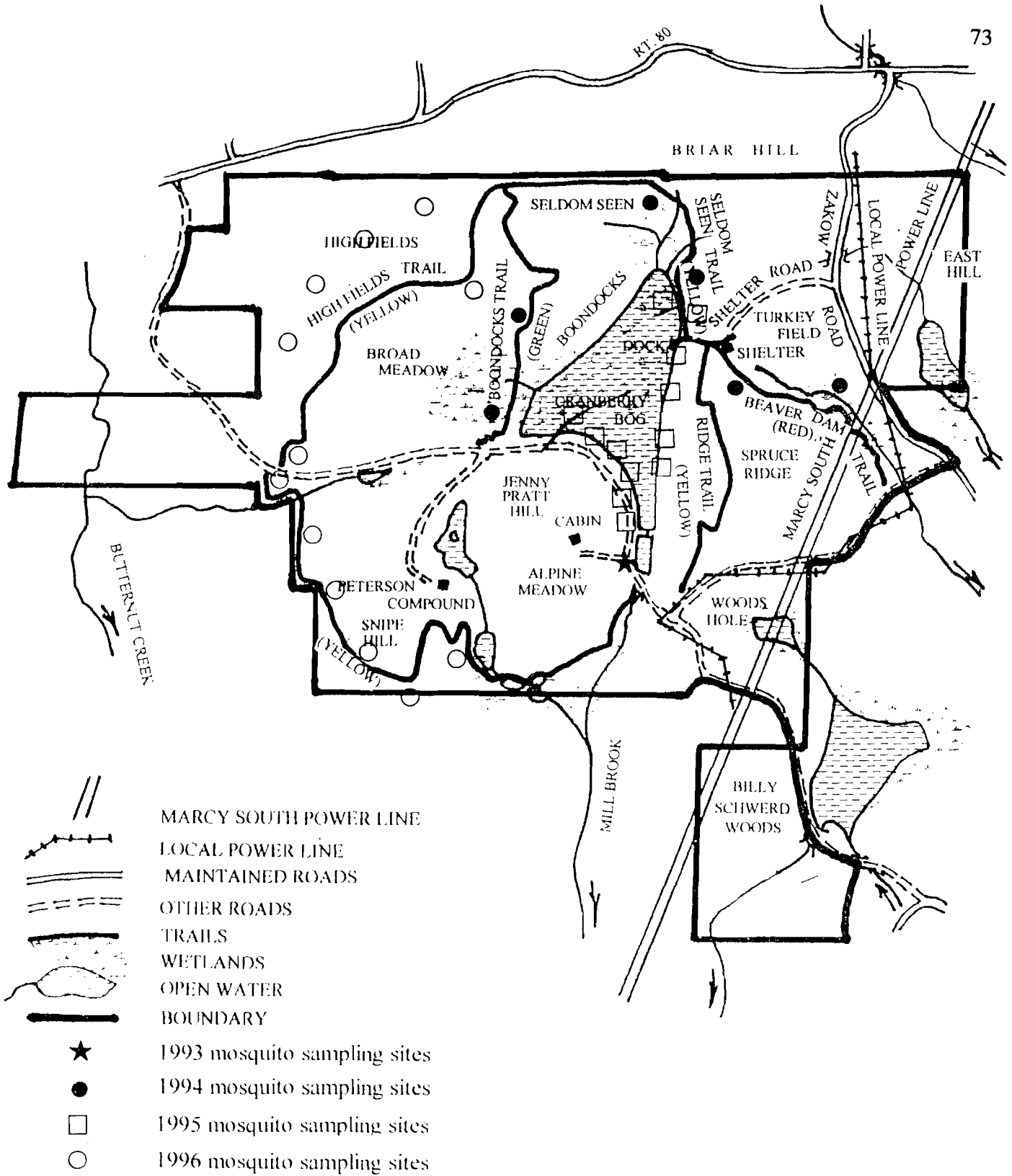


Figure 1. Mosquito sampling sites - Greenwood. 1993 -1996.

Table 1. Dates and sites of sampling activities during 1996. Sequence in which numbered sites were visited is noted parenthetically.

<u>Site</u>	<u>Date</u>	<u>Time</u>	
High Fields	(1-6)	Jun 13	6:30-10:00 a.m.
	(1-6)	Jun 24	6:50-9:30 a.m.
	(1-6)	Jul 12	6:15-9:45 a.m.
	(1-6)	Jul 17	5:10-7:50 p.m.
	(1.6-2)	Jul 31	6:25-9:35 a.m.
	(1-6)	Aug 7	5:20-8:10 p.m.
	(1-6)	Aug 16	6:35-9:55 a.m.
	(6-1)	Aug 29	4:40-6:55 p.m.
	(1-6)	Sep 5	7:10-10:30 a.m.
Snipe Hill	(1-6)	Jun 20	6:50-10:00 a.m.
	(6-1)	Jun 24	5:30-8:08 p.m.
	(2-6.1)	Jul 3	6:40-10:00 a.m.
	(6-1)	Jul 12	5:05-7:40 p.m.
	(1-6)	Jul 17	6:35-9:10 a.m.
	(1-6)	Aug 7	6:40-9:50 a.m.
	(1-6)	Aug 29	6:40-10:10 a.m.
	(1-6)	Sep 5	3:20-6:10 p.m.
	(1-6)	Sep 9	3:50-6:45 p.m.

Table 2. Mosquitoes collected during 1996

High Fields Circuit

<u>Species</u>	<u>Date</u>	<u>Station (Number)</u>
<i>Aedes punctor</i> (Kirby)	Jun 13	4 (1); 6 (2)
	Jun 24	2 (1)
<i>Aedes canadensis</i> (Theobald)	Jun 13	6 (2)
	Jul 17	6 (3)
<i>Aedes hendersoni</i> (Cockerell)	Aug 29	1 (1)
<i>Anopheles punctipennis</i> (Say)	Aug 16	2 (3); 5 (1)
	Sep 5	2 (2)
<i>Coquillettidia perturbans</i> (Walker)	Jul 17	6 (1)

Snipe Hill Circuit

<u>Species</u>	<u>Date</u>	<u>Station (Number)</u>
<i>Aedes fitchii</i> (Felt & Young)	Jun 20	4 (1)
<i>Aedes triseriatus</i> (Say)	Aug 7	5 (1)
	Sep 5	4 (1)
<i>Anopheles punctipennis</i> (Say)	Aug 29	2 (1); 4 (1); 5 (1)

REFERENCES CITED

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