

# AUGMENTATION OF AMERICAN MARTEN ON NORTHERN CAPE BRETON ISLAND

## PROGRESS REPORT 2006 - 2008

James Bridgland<sup>1</sup> and Peter Austin-Smith<sup>2</sup>

January 2008

### Background

The Cape Breton population of American marten has been listed as endangered under the NS Endangered Species Act since 2001. Following genetic testing (Johnson et al. 2005), habitat evaluation (Habitat Subcommittee 2004) and development of an augmentation plan (Austin-Smith 2006), the NS Marten Recovery Team (2006) recommended the augmentation of the Cape Breton marten population by up to 150 animals over a period of 3-5 years.

This report documents efforts taken in 2006-2008 by Parks Canada, NS Dept Natural Resources and the Unama'ki Institute of Natural Resources, with support from the New Brunswick Department of Natural Resources and the Trapper's Association of Nova Scotia, on behalf of the Nova Scotia Marten Recovery Team to improve the viability of American marten (*Martes americana*) on northern Cape Breton Island by augmenting population numbers.

### Results

#### Relocation

Following the protocols set out in the augmentation plan (Austin-Smith 2006), relocations involved trapping and holding animals in northern New Brunswick until there were enough to ship; obtaining veterinary clearance to move them between provinces; moving them by truck (or in one case helicopter) to NSDNR facilities in Cape Breton for tagging and radio-collaring; and finally to holding pens at release where they were held and fed for three to five days prior to release.

Two live-trapping sessions, one in late fall 2006, and one in early spring 2007, were conducted in northern New Brunswick to test handling, transport and collaring techniques and protocols. No marten were caught during the late fall live-trapping session; three marten were caught during the spring session, when due to breeding status of the females, only males were to be translocated. Of these three animals, one female was released on site, one male escaped at the site of capture and one wild-caught male marten was transported to CBI. The male from NB and two captive-bred marten from NSDNR facilities at Shubenacadie were released near the Trout Brook Provincial Wilderness Area April 23rd, 2007. Two additional captive-bred marten were released in July 2007.

A third trapping session occurred in Northern New Brunswick from 19 November to 6 December 2007, during which a total of 38 animals (20 male, 18 female) were captured during 758 trap-nights ( $\approx 20$  Trap-nights per animal). The males trapped weighed from 560 to 900 g (mean = 715 g; s.d = 83.6 g), the females weighed 300 to 540 g (mean = 448; s.d. = 68.2 g). Three females escaped and one died in New Brunswick giving a total of 34 animals transferred to Cape Breton. Of these 34 one male died in transport, one female escaped at Baddeck, two males and one female died prior to release. This is a mortality of five animals out of the 38 originally trapped or 13%. The remaining 29 animals were

---

<sup>1</sup> Parks Canada, Ingonish Beach, NS, B0C 1L0

<sup>2</sup> Nova Scotia Department of Natural Resources, 136 Exhibition St., Kentville, NS. B4N 4E5

released at Black Brook, Paquette Lake and Cheticamp River in Cape Breton Highlands National Park and the provincial Trout Brook Wilderness Area (Table 1).

### Public Engagement

The involvement of the Nova Scotia Trapper's Association in providing advice and assistance in trapping animals in New Brunswick and of the 1<sup>st</sup> Whycocomagh Boy Scout Troop in constructing nest boxes for the holding pens used at the release sites have been invaluable to this project.

The releases at Black Brook were well attended by the media and generated much (Tables 2 & 3) interest and coverage. These releases were also attended by the environmental club from the local highschool and by interested park staff.

### Monitoring

Five of the six radio-collared animals released in November-December have been re-located during telemetry flights on 11 and 19 December 2007 and 17 January 2008 (Figure 1). Aerial telemetry tracking will continue subject to the availability of NSDNR Flight Services machines with observers from NSDNR, Parks Canada and UINR.

One animal (presumably uncollared and released from Paquette Lake) was sighted by park staff on North Mountain in early January. A ground tracking program is underway at CBH to determine suitable locations for deploying bait/feeding stations and hair snag traps in February.

### Partnerships

The Cape Breton Island American Marten Augmentation Project is a cooperative project being undertaken by Nova Scotia Department of Natural Resources (Wildlife Division), Parks Canada and the Unama'ki Institute of Natural Resources, with the generous support and assistance of the New Brunswick Department of Natural Resources and the Nova Scotia Trapper's Association.

The project is being undertaken on behalf of the Nova Scotia Marten Recovery Team, comprising representatives from Nova Scotia Department of Natural Resources, Parks Canada, Unama'ki Institute of Natural Resources, Canadian Forestry Service, Storaenso Forestry Products, Nova Scotia Trappers Association, Nova Forest Alliance, Wildlife Conservation Society Canada and Acadia University.

Table 1. American Marten released in northern Cape Breton fall 2007

Release Site	Release Date	Males	Females	No Collars [Freq Mhz]
Black Brook	24 Nov 2007	2	3	1 [148.540]
	30 Nov 2007	4	1	0
Paquette Lake	30 Nov 2007	4	1	2 [151.441, 151.700]
Cheticamp River	03 Dec 2007	4	1	1 [151.419]
	06 Dec 2007	3	1	0
Trout Brook	10 Dec 2007	2	3	2 [151.620, 148.520]
Totals		19	10	6

Table 2. Print media coverage of marten release in northern Cape Breton November 2007

Date	Publication	Author	Title
2006 July 18	Cape Breton Post	Chris Hayes	American martens catlike creature will be released into Cape Breton Wilderness
2007 Nov 26	Cape Breton Post	Chris Hayes	American martens to be released in national park
2007 Nov 27	Cape Breton Post	Chris Hayes	Marten Up. Five American martens to be released in Cape Breton today
2007 Nov 26	Halifax Chronicle Herald	Aleena MacDonald	Project underway to help boost numbers of martens in NS woods
2007 Nov 30	Halifax Chronicle Herald	Aleena MacDonald	Endangered martens poke around Highlands. Recovery team rebuilds population as other critters chatter in protest
2007 Dec 7	Le Courrier de la Nouvelle Ecosse		Rétablissement d'une population de martres sauvages
Summer 2006	UINR Marten Vol 2 Issue 2		Marten Comeback
Winter 2007	UINR Marten Vol 3 Issue 4		Marten Matchmaking
Spring 2008	Creating a Culture of Conservation: Ecological Integrity in Canada's National Parks		TBD

Table 3. Broadcast media coverage of marten release in northern Cape Breton November 2007

Date	Broadcaster	Details
2007 Nov 26	CJLS-AM, Yarmouth; CIGO-FM, Port Hawkesbury; CKEC-AM, New Glasgow; CJFX-AM, Antigonish; CKNI-FM, Moncton; CJLS Yarmouth; CKDH-AM, Amherst; CHFX-FM, Halifax.	“Hunted near extinction, efforts are underway to repopulate the American marten in the Cape Breton Highlands....” Length 00:00:18 to 00:00:25
	CKTO-FM, Truro;CKTY-FM, Truro;	News Item - “A recovery project to re-populate the American Martin in the Cape Breton Highlands will begin later this week. ...” Length 00:00:15 to 00:00:32
2007 Nov 28	CTV Atlantic	Live at Five spot by Randy MacDonald
2007 Dec 04	CBC Radio One - Maritimes. Radio Noon	Spot by Dave Atkinson. Length 00:05:55
2008 Feb ?	CBC TV	Land And Sea

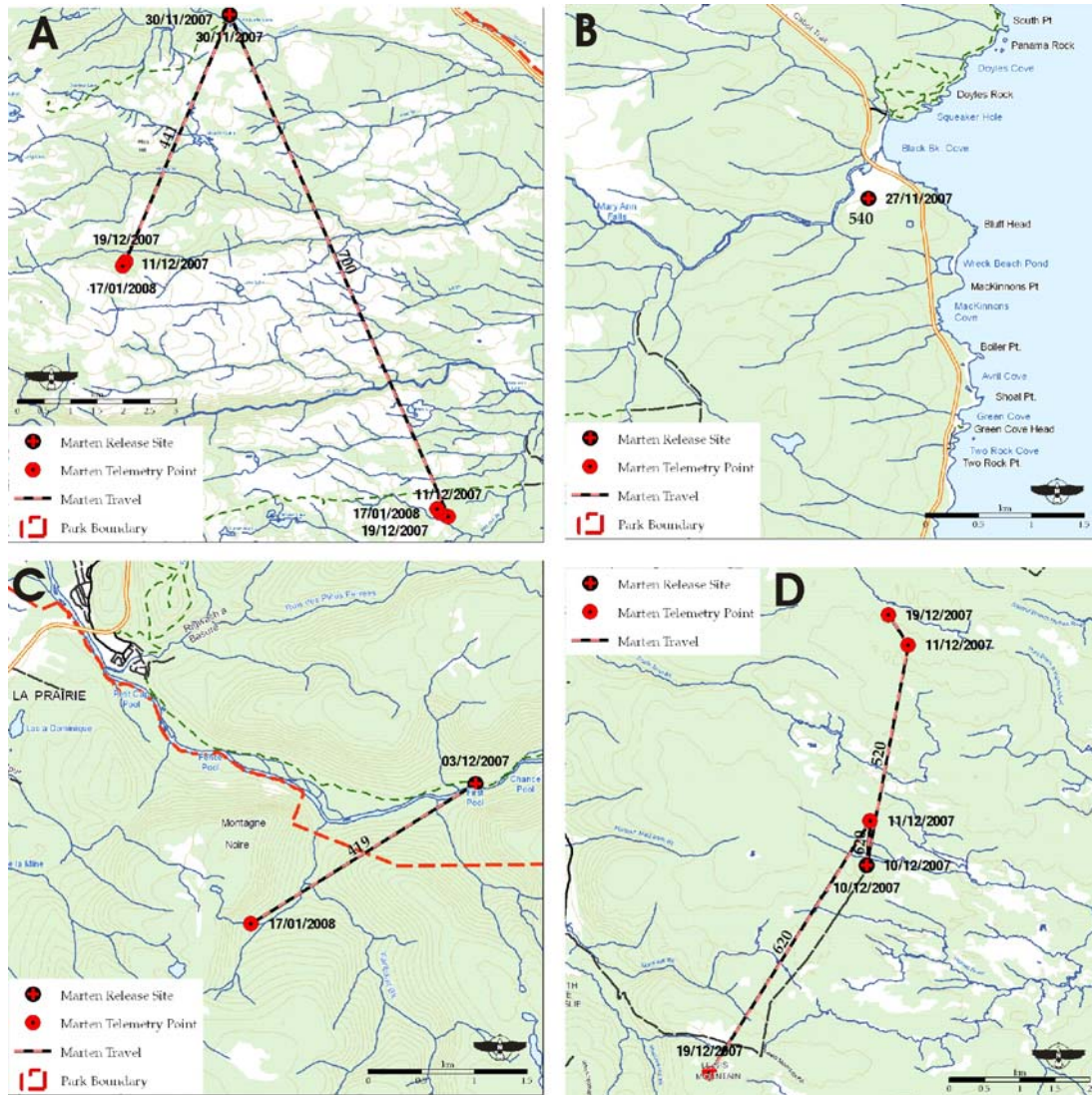


Figure 1 Marten release sites and subsequent movements November 2007 to January 2008. Release sites: A - Paquette Lake; B - Black Brook; C - Cheticamp River; D; Trout Brook.

## References

Austin-Smith, Jr., Peter. 2006.

Feasibility Assessment and Plan for Augmenting the Cape Breton American Marten Population. For NS DNR and Parks Canada CBHNP. Nova Scotia Marten Recovery Team.

Habitat Subcommittee 2004.

Second Report of the Habitat Subcommittee to the Marten/Lynx Recovery Team (April 2004)

Johnson W.E., A. Antunes, S. Luo, P. Austin-Smith, M.O'Brien, S. J. O'Brien. 2005.

Genetic Distinctiveness of the Nova Scotia Populations of American marten, *Martes americana*. (Unpublished.)

Nova Scotia American Marten Recovery Team. 2006.

Recovery Strategy for American marten (*Martes americana*) on Cape Breton Island, Nova Scotia in Canada. Nova Scotia, Canada.