



**CANADIAN WILDLIFE SERVICE INSPECTION VISIT
SEAWOLF (MARGAREE) ISLAND NATIONAL WILDLIFE AREA
JULY 14-16, 2009**



Environment Canada Environnement Canada
Canadian Wildlife Service Service canadien de la faune



**SEAWOLF (MARGAREE) ISLAND NATIONAL WILDLIFE AREA
INSPECTION VISIT
2009**

C. M. MacKinnon¹ and A.C. Kennedy¹

General

Survey date: 14-16 July, 2009

Survey crew: Colin MacKinnon (Canadian Wildlife Service), Andrew Kennedy (CWS)

Weather: General: sunny, cloud cover 15%-25%. Rain and high winds overnight
July 15
Temperature: High of 21.7C on July 14, low of 9.1C overnight on July 15
Wind: S and SW winds throughout, ranging from 7-30 km/h

Data obtained from Grand Etang Climate Station (ID 8201969)

Summary

Environment Canada – Canadian Wildlife Service (CWS) Habitat staff Colin MacKinnon and Andrew Kennedy conducted a site visit at Seawolf (Margaree) Island National Wildlife Area (NWA) on July 14-16, 2009. Transport to the island was via CCG Helicopter (Messerschmitt-Bolkow-Blohm 105), departing from the Northeast Margaree NS DNR Depot. Staff arrived on the island at 1115 on the 14th and departed on the 16th at 1215, arriving back at Northeast Margaree at 1231. A summary of the site visit follows:

- a) A seabird survey was conducted via helicopter along the east and west sides of the island upon departure on July 16th. See Table 1 for results from this survey, and previous surveys.
- b) Songbird and wildlife observations were recorded during a hike across the island on July 15th, as well as during various daily trips between the camp and lighthouse. See Table 2 for results from this survey, and previous surveys.
- c) The White Spruce die-off, presumably as a result of the Spruce Beetle (*Dendroctonus rufipennis*) infestation in Western Cape Breton, has expanded. A larger proportion of the forested area on the island was observed to be impacted during this visit (Figures 1, 2).
- d) The CWS cabin was examined and painting / repairs performed (Figures 3-6).

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A. Seabird Survey

A short seabird survey was conducted as we departed Margaree Island. The coastline of the island was flown at approximately 100 feet above sea level, and the presence of a number of seabird species was recorded, including Double-crested Cormorant (*Phalacrocorax auritus*), Great Cormorant (*Phalacrocorax carbo*), Great Blue Heron (*Ardea herodias*), Black Guillemot (*Cepphus grylle*), Herring Gull (*Larus argentatus*) and Great Black-backed Gull (*Larus marinus*).

The Great Cormorant colony was systematically photographed at a horizontal distance of approximately 300 feet using a Nikon D300 Digital SLR camera. Unfortunately photo quality was not sufficiently strong enough to permit nest counts upon completion of the survey.

B. Songbird / Wildlife Survey

An avifaunal survey was conducted during transit from the lighthouse / helicopter landing area, to the CWS cabin. Additional species sightings were recorded during an island walk on the morning of July 15th. As in past visits, Fox Sparrows (*Passerella iliaca*) were observed and heard while visiting the island. Twenty-four species were noted during this visit. Two new species were recorded on the island during this visit: a lone Dark-eyed Junco (*Junco hyemalis*), and a male Northern Harrier (*Circus cyaneus*). To date, a total of 63 species of birds have been recorded on, or in the immediate vicinity of Margaree Island.

One Snowshoe hare (*Lepus americanus*) was observed on the island in the vicinity of the lightkeeper's house, on the evening of July 15th. Eastern coyote (*Canis latrans*) scat was also observed in a number of areas along the trail from the lighthouse to the CWS cabin. No coyotes were observed while on the island. A Red fox (*Vulpes vulpes*) or coyote trail was observed along the western side of the island. A den site consisting of two holes and believed to be that of a Red fox was discovered at the north end of the island in a sand dune.

A total of 104 Gray seals (*Halichoerus grypus*) were observed either loafing on rocks in the intertidal zone on the western side of the island or in the waters in the immediate vicinity of the island.

A total of three Maritime Garter Snakes (*Thamnophis sirtalis pallidula*) were observed on the island near the old lightkeeper's house, and in remains of former buildings near the CWS cabin.

C. White Spruce die-off

Considerable evidence of dead and dying white spruce along the eastern side of Margaree Island was observed again during this visit (Figures 1,2). The area affected is adjacent to two areas of blown-down spruce. In 2007, the Nova Scotia Department of Natural Resources (Inverness County District Office) advised that there had been an outbreak of Spruce Beetle (*Dendroctonus rufipennis*) in the areas of Lake Ainslie, Dunvegan / St. Rose, Southwest Margaree and north to Cheticamp. This beetle attacks mature and over-mature White Spruce, but may also be found in Red Spruce as well. Areas with blowdowns are also preferred as the beetle can become easily established here, with minimal interference. No collections have taken place to confirm that this species is responsible for the dead and dying spruce trees on Margaree Island; however given the relative proximity to severely impacted areas of western Inverness County; it is likely that the defoliated and dead spruce trees at Margaree Island are a result of the current and ongoing Spruce Beetle infestation. Current area affected in 2009 is estimated to be at least 15 hectares (approximately 38 acres).

D. Maintenance / Signage

The following activities were performed:

- The rear door on the CWS cabin had been removed from its hinges; it was put back into place, secured with 4 inch galvanized spikes and boarded up (Figure 3).
- Camp exterior was scraped and painted white except for a portion on each end near the peak. Trim was re-painted red, front door painted red, front storm door re-attached and painted black (Figures 4-5).
- The trail from the lighthouse to the camp was cleared / opened up upon arrival. Deadfalls were removed, the trailhead at the camp and at the lighthouse was flagged with orange flagging tape.
- The fire extinguisher, fire bucket and CWS logbook / OHS manual all remain in place inside the CWS cabin. A 20 person first aid kit was added in addition to the NS # 3 kit already in place (Figure 6-7).
- The wood stove is not to be used, as the current stove pipe through attic is rusted and severely deteriorated. A notice was fixed to the stove to ensure any potential users are aware of this hazard.
- NWA Public Notice and Boundary Signage at the southeast landing site was verified as in place and legible (Figure 8).

Inventory of Items Remaining in Camp 2009

Items left on site in 2009 indicated.

Ground Level

First Aid Kit – 1 (N.S. # 3, installed 2003)
First Aid Kit – 1 (Federal 20 person, installed 2009)
8' U-Flange Steel Posts - 2
Folding Chair – 1 (2009)
Toilet paper – 4 rolls
Fire Extinguisher (2.5lbs.) – 1 (status is “good”, installed 2003)
Fire Extinguisher (5 lbs.) – 1 (status is “good”, installed 2009)
Buck Saw + spare blade – 1 (2009)
Straw broom – 1 (2009)
Push broom – 1 (2009)
Hand Saw -1 (2009)
Round mouth shovel -1 (2009)
Fire Bucket – 1 (2003)
Water (non-potable) – 16 lites (2009)

Attic Level

Extension poles – 2 (2009)
Paint thinner – 2 two litre jugs (2009)
White Tremclad paint – 1 pint (2009)
Red Tremclad paint – 1 pint (2009)
Benjamin Moore Alkd White paint – 3 gallons
MONO Exterior caulking – 2 tubes (2009)
Paint brushes – 2X 4”, 1X1” (2009)
Glazing putty (white) – 3 tubs (2009)
Paint rollers – 3 (2009)
Roller handles – 2 (new ones required for next visit)
Paint trays – 2 (2009)
Paint tray liners – 2 (2009)
Masking tape – 1 roll (2009)
Stovepipe – 4 lengths (surface rust present)
Roofing nails 2 ½” galvanized common nails
Tablecloth – 1 (2009)
“Snap-lite” Glow sticks – 1 package (2009)
¼” HEX nuts – 100 (2009)
¼” washers – 100 (2009) Toilet paper – 12 rolls (2009)
Roofing Cement – 1 gallon Putty Knives – 2 (2009)
¼” X 3 ½” carriage bolts – 50 (2009) Matches – 2 boxes of 250 (2009)
NWA Public Notice – 6 aluminum (2009) Tar paper – 1 roll
Roofing shingles (red) – 2 bundles Exterior Cedar shingles – 1 bundles
NWA Boundary Signs – 4 aluminum (2009) NWA 2’X4’ sign (crezon) - 1

Table 1. Summary of Colonial Nesting Bird Surveys at Margaree Island NWA (1965-2009).

Date of Survey	Species															
	Great Cormorant		Double-crested Cormorant		Great Blue Heron		Herring Gull		Great Black-Backed Gull		Common Tern		Razorbill		Black Guillemot	
	N	A	N	A	N	A	N	A	N	A	N	A	N	A	N	A
22 July 1965	NR	45	NR	NR	NR	NR	NR	125	NR	20	NR	60	NR	NR	NR	5
07 May 1971 ^A	80p	NR	NR	NR	NR	NR	NR	15p	NR	50+	NR	NR	NR	NR	NR	NR
20 June 1973	34+	82	NR	NR	5	1	NR	180+	NR	32	13	50	NR	NR	NR	40
26 May 1976	91	NR	NR	NR	NR	16	491	NR	147	NR	NR	15	NR	NR	NR	45
09 June 1981	69 (110)	NR	NR	NR	NR	12p	427	1000 +	342	800+	2	20- 40	NR	5	1	80+
29 May 1984	127	NR	NR	NR	21	NR	602	NR	273	NR	0	1	NR	9	1	109
21 May 1986	110	NR	NR	NR	53	NR	<25	NR	<10	NR	NR	NR	NR	11	NR	200+
26 May 1988*	NR	88	NR	NR	31	NR	NR	40	NR	30	NR	NR	NR	NR	NR	105
04 June 1990	28 (55)	NR	NR	NR	3	3	NR	80	NR	89	NR	2	NR	2	NR	60
08 June 1992	58	100+	NR	NR	8	10+	30	109	1	41	NR	6	NR	0	NR	46
08 June 1994*	52	108	NR	NR	~10	NR	1	73	1	20	NR	NR	NR	NR	100	119
09 June 1997	37	84	NR	1	23	NR	189	90	9	77	NR	NR	NR	1	NR	13
21 June 2000	67	247	1	3	7	1+	6+	230	NR	10	NR	NR	NR	NR	NR	38
14-15 June 2003	73	248	NR	13	NR	8	41	200- 300	1	150+	NR	1	NR	NR	NR	275+
09 July 2007 ^{AS}	56	NR	NR	40	NR	7	NR	15	NR	6	NR	0	NR	0	NR	11
July 2009	NR	8	NR	0	NR	3	NR	94	NR	25	NR	2	NR	0	NR	444

N = Nests counted
NR = not recorded

^{AS} Results from aerial survey
A - adults; N - nests; p - pairs.
() – estimated total
* Rushed survey

Species	Date of Survey															
	14-16 July 2009	09 July 2007	14- 15 June 2003	21 June 2000	09 June 1997	08 June 1994	08 June 1992	04 June 1990	26 May 1988	21 May 1986	29 May 1984	09 June 1981	26 May 1976	20 June 1973	07 May 1971	22 July 1965
Whimbrel																37
Spotted Sandpiper	2	2	3		2	1	2				4	2		1		3
Roseate Tern								1								
Northern Flicker	1				1						1					1
Yellow- bellied Sapsucker												1				
Eastern Wood Pewee			1													
Alder Flycatcher	1		2		2		1									
Swallow sp.			2													
Barn Swallow		7									5	3		3		2
Tree Swallow		2														
Bank Swallow	5 40 nests (13 + 27)	2		10	40		25	10			1	106+ nests		8 nests		30
Black- capped Chickadee							4				1					
Boreal Chickadee	3		1		2		4				1	1				3

Species	Date of Survey															
	14-16 July 2009	09 July 2007	14- 15 June 2003	21 June 2000	09 June 1997	08 June 1994	08 June 1992	04 June 1990	26 May 1988	21 May 1986	29 May 1984	09 June 1981	26 May 1976	20 June 1973	07 May 1971	22 July 1965
Dark-eyed Junco	1															
Bobolink											1					
Common Grackle																9
European Starling								1			2	2		6		15



Figure 1. Area of dead / defoliated Red Spruce and White Spruce, east side of island, 2009. (A. Kennedy photo)



Figure 2. Area of dead / defoliated Red Spruce and White Spruce, east side of island, 2009. (A. Kennedy photo)



Figure 3. East wall of CWS cabin, rear door boarded up. (A.Kennedy photo)



Figure 4. South wall of CWS cabin with new NWA Boundary, Public Notice and 2' X 4' signage installed. (A. Kennedy photo)



Figure 5. Northwest wall of CWS cabin. (Colin MacKinnon photo)

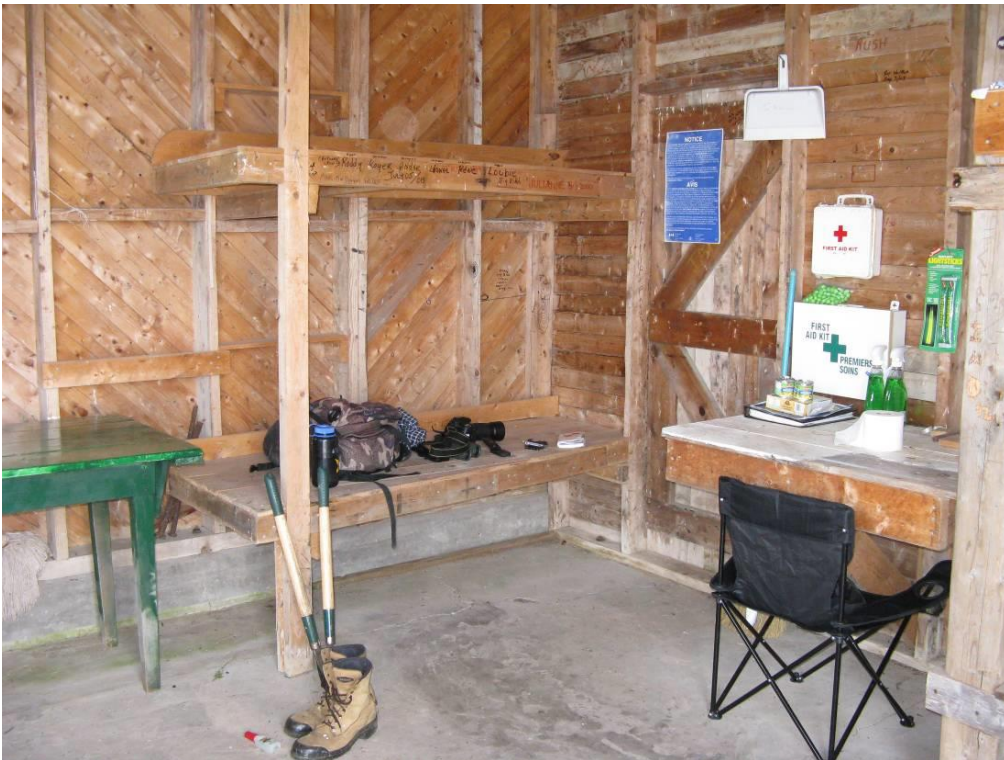


Figure 6. Interior of CWS Cabin with First Aid kits installed. (A. Kennedy photo)



Figure 7. Interior of CWS Cabin with notice re: no stove use. (A. Kennedy photo)



Figure 8. NWA signage (Public Notice and NWA Boundary) at landing area (A. Kennedy photo)