

**SEAWOLF (MARGAREE) ISLAND NATIONAL WILDLIFE AREA  
INSPECTION VISIT  
2007**

C. M. MacKinnon, A. C. Kennedy and A. A Campbell

General

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Survey date: 09 July, 2007

Survey crew: Andrew Kennedy (Canadian Wildlife Service), Adam Campbell (CWS),  
Harrison McRae (Canadian Coast Guard)

Weather: General: clear and sunny  
Temperature: 16°C  
Wind: N at 22 km/h

Data obtained from Grand Etang Climate Station (ID 8201969)

Summary

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Environment Canada – Canadian Wildlife Service (CWS) Habitat staff, Andrew Kennedy and Adam Campbell, conducted a site visit at Seawolf (Margaree) Island National Wildlife Area (NWA) on July 9, 2007. Transport to the island was via CCG Helicopter (Messerschmitt-Bolkow-Blohm 105) from the Port Hawkesbury airport. Staff arrived on the island at 1320 and departed at 1600. A summary of the site visit follows:

- a) A seabird survey was conducted via the helicopter along the east and west sides of the island. See Table 1 for results from this survey, and previous surveys.
- b) A songbird survey was conducted during a short hike around the CCG lighthouse property, and along the trail from the CCG lighthouse to the CWS cabin. See Table 2 for results from this survey, and previous surveys.
- c) Considerable evidence of dead and dying White Spruce was observed on the east side of the island (Figure 1).
- d) The CWS cabin was examined and some minor repairs performed (Figures 2-5).

#### A. Seabird Survey

A short seabird survey was conducted as we arrived at Margaree Island, and again as we departed. The coastline of the island was flown at approximately 150 feet above sea level, and the presence of a number of seabird species was recorded, including Double-crested Cormorant, Great Cormorant, Great Blue Heron, Black Guillemot, Herring Gull and Great Black-backed Gull.

The Great Cormorant colony was systematically photographed at a distance of approximately 300 feet using a Canon Rebel G 35 mm camera, with a 28-80mm zoom lens and Fujichrome Sensia 100 slide film. The photos were scanned at 600 dpi, arranged in sequence, magnified and active Great Cormorant nests were counted. Nests were determined to be active in 2007 by the presence of a nest structure or nest material, adult and juvenile birds attending the nest site, and white-washed rocks (guano). A total of 56 nests were counted using this method. Individual adult (breeding + non-breeding) and juvenile Great Cormorants were not recorded.

#### B. Songbird / Wildlife Survey

A songbird survey was conducted during transit from the lighthouse / helicopter landing area, to the CWS cabin. As in past visits, Fox Sparrows were observed and heard while visiting the island. Only eight species were noted, the low number of species observed is potentially due to the timing of the survey and the limited time spent on the island. To date, a total of 60 species of birds have been recorded on, or in the immediate vicinity of Margaree Island.

Two snowshoe hare were observed on the island, and there was considerable evidence of this species presence on the island (browsed vegetation including white spruce, defecated pellets). Coyote 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.

Harrison McRae (CCG helicopter pilot) advised that there was 100% mortality of Grey Seal pups at Margaree Island during the late winter of 2007, due to severe weather. The population is currently being monitored by DFO-research scientists, and it is estimated that there are 60 breeding pairs of Grey Seals currently using Margaree Island as a whelping site. At least 12 grey seals were observed near the south end of the island during our visit.

### C. White Spruce die-off

Considerable evidence of dead and dying white spruce along the eastern side of Margaree Island was observed (Figure 1). The area affected is adjacent to two areas of blown-down spruce. The Nova Scotia Department of Natural Resources (Inverness County District Office) has advised that there has 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. It is possible that the defoliated and dead spruce trees at Margaree Island are a result of the Spruce Beetle; however the affected area was not ground truthed to verify this.

### D. Maintenance / Signage

The following activities were performed:

- An NWA Public Notice sign was installed at the “landing area” at the south end of the island, in addition to the NWA Boundary Sign already in place at this point (Figure 6).
- The deteriorated wooden 2' X 4' NWA sign was removed from the exterior of the CWS cabin and a new wooden 2' X 4' sign was installed. One wooden 2' X 4' sign remains in storage in the attic of the cabin.
- NWA Public Notice signs were also replaced on the CWS cabin and on the former lightkeeper's house near the CCG lighthouse.
- 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.
- The fire extinguisher, fire bucket and CWS logbook / OHS manual all remain in place inside the CWS cabin. A first aid kit is needed as the one left on site in 2003 is missing.

**Table 1. Summary of Colonial Nesting Bird Surveys at Margaree Island NWA (1965-2007).**

| 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 <sup>A</sup>  | 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<br>(110)     | NR   | NR                       | NR | NR               | 12p | 427          | 1000<br>+   | 342                     | 800+ | 2           | 20-<br>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<br>(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-<br>300 | 1                       | 150+ | NR          | 1         | NR        | NR | NR              | 275+ |
| 09 July 2007 <sup>A</sup> | 56              | NR   | NR                       | 40 | NR               | 7   | NR           | 15          | NR                      | 6    | NR          | 0         | NR        | 0  | NR              | 11   |

N = Nests counted  
A = Adults counted  
NR = not recorded

<sup>A</sup> Results from aerial survey  
a - adults; n - nests; p - pairs.  
() - estimated total  
\* Rushed survey

**Table 2. Other Bird Species Observed During Surveys on Margaree Island NWA.**

| Species                  | Date of Survey |                 |              |              |              |              |              |             |             |             |              |             |              |             |              |
|--------------------------|----------------|-----------------|--------------|--------------|--------------|--------------|--------------|-------------|-------------|-------------|--------------|-------------|--------------|-------------|--------------|
|                          | 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 |
| Common Loon              |                |                 |              | 3            |              | 4            | 3            |             |             | 1           |              |             |              |             |              |
| Red-throated Loon        |                |                 |              |              |              |              |              |             |             | 1           |              |             |              |             |              |
| Northern Gannet          |                |                 | 75           | 100          |              | 2            |              |             |             |             | 30           |             |              |             |              |
| White-winged Scoter      |                |                 |              |              |              |              | 60           |             |             |             |              |             |              |             |              |
| Surf Scoter              |                | 1               |              |              |              |              |              |             |             |             |              |             |              |             |              |
| Black Scoter             |                |                 |              |              | 50           |              |              |             |             |             |              |             |              |             |              |
| Common Eider             |                |                 | 24           | 3            |              |              | 5            |             |             | 9           | 10           |             |              |             |              |
| Red-breasted Merganser   |                |                 |              |              |              |              |              |             |             | 2           | 5            |             |              |             |              |
| Sharp-shinned Hawk       |                |                 |              |              |              |              | 1            |             |             |             |              |             |              |             |              |
| Red-tailed Hawk          |                |                 | 1            |              |              |              |              |             |             |             |              |             |              |             |              |
| Bald Eagle               | 5              | 2               | 1            | 1            |              |              | 1            |             |             |             | 2            |             |              |             |              |
| American Kestrel         |                |                 |              |              |              |              | 1            |             |             |             |              |             |              |             |              |
| Whimbrel                 |                |                 |              |              |              |              |              |             |             |             |              |             |              |             | 37           |
| Spotted Sandpiper        | 2              | 3               |              | 2            | 1            | 2            |              |             |             | 4           | 2            |             | 1            |             | 3            |
| Roseate Tern             |                |                 |              |              |              |              | 1            |             |             |             |              |             |              |             |              |
| Northern Flicker         |                |                 |              | 1            |              |              |              |             |             | 1           |              |             |              |             | 1            |
| Yellow-bellied Sapsucker |                |                 |              |              |              |              |              |             |             |             | 1            |             |              |             |              |
| Eastern Wood Pewee       |                | 1               |              |              |              |              |              |             |             |             |              |             |              |             |              |
| Alder Flycatcher         |                | 2               |              | 2            |              | 1            |              |             |             |             |              |             |              |             |              |
| Swallow sp.              |                | 2               |              |              |              |              |              |             |             |             |              |             |              |             |              |
| Barn Swallow             | 7              |                 |              |              |              |              |              |             |             | 5           | 3            |             | 3            |             | 2            |
| Tree Swallow             | 2              |                 |              |              |              |              |              |             |             |             |              |             |              |             |              |
| Bank Swallow             | 2              |                 | 10           | 40           |              | 25           | 10           |             |             | 1           | 106+ nests   |             | 8 nests      |             | 30           |

| Species                      | Date of Survey     |                           |                    |                    |                    |                    |                    |                   |                   |                   |                    |                   |                    |                   |                    |
|------------------------------|--------------------|---------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------|-------------------|-------------------|--------------------|-------------------|--------------------|-------------------|--------------------|
|                              | 09<br>July<br>2007 | 14-<br>15<br>June<br>2003 | 21<br>June<br>2000 | 09<br>June<br>1997 | 08<br>June<br>1994 | 08<br>June<br>1992 | 04<br>June<br>1990 | 26<br>May<br>1988 | 21<br>May<br>1986 | 29<br>May<br>1984 | 09<br>June<br>1981 | 26<br>May<br>1976 | 20<br>June<br>1973 | 07<br>May<br>1971 | 22<br>July<br>1965 |
| Black-capped Chickadee       |                    |                           |                    |                    |                    | 4                  |                    |                   |                   | 1                 |                    |                   |                    |                   |                    |
| Boreal Chickadee             |                    | 1                         |                    | 2                  |                    | 4                  |                    |                   |                   | 1                 | 1                  |                   |                    |                   | 3                  |
| Red-breasted Nuthatch        |                    |                           |                    | 1                  |                    |                    |                    |                   |                   |                   |                    |                   |                    |                   |                    |
| Ruby-crowned Kinglet         |                    |                           |                    |                    |                    | 3                  |                    |                   |                   |                   |                    |                   |                    |                   |                    |
| Golden-crowned Kinglet       |                    | 2                         |                    |                    |                    |                    | 1                  |                   |                   | 2                 |                    |                   |                    |                   |                    |
| American Robin               | 1                  | 16                        |                    | 9                  |                    | 4                  | 1                  |                   |                   |                   |                    |                   | 2                  |                   | 2                  |
| Swainson's Thrush            | 1                  | 7                         |                    | 6                  |                    | 1                  |                    |                   |                   | 1                 | 3                  |                   |                    |                   | 1                  |
| American Crow                |                    | ~10                       | 1                  |                    | 1                  | 1                  |                    |                   |                   | 2                 | 3                  |                   | 1                  |                   |                    |
| Common Raven                 |                    | 2-3                       | 1                  | 4                  | 1                  | 2                  |                    |                   |                   | 2                 | 2                  |                   |                    |                   |                    |
| Cedar Waxwing                |                    |                           |                    |                    |                    |                    |                    |                   |                   |                   | 2                  |                   |                    |                   |                    |
| Red-eyed Vireo               |                    |                           |                    |                    |                    | 2                  |                    |                   |                   |                   |                    |                   |                    |                   |                    |
| Northern Parula              |                    |                           |                    |                    |                    |                    |                    |                   |                   | 1                 |                    |                   |                    |                   |                    |
| Black-throated Green Warbler |                    |                           |                    | 4                  |                    |                    |                    |                   |                   | 1                 |                    |                   |                    |                   |                    |
| Blackpoll Warbler            |                    |                           |                    |                    |                    |                    |                    |                   |                   | 1                 | 2                  |                   |                    |                   |                    |
| Magnolia Warbler             |                    | 3                         |                    | 5                  |                    | 4                  | 9                  |                   |                   | 4                 | 4                  |                   | 1                  |                   | 3                  |
| Yellow-rumped Warbler        |                    | 5                         |                    | 3                  |                    | 3                  |                    |                   |                   | 3                 |                    |                   |                    |                   | 1                  |
| Chestnut-sided Warbler       |                    |                           |                    |                    |                    | 4                  |                    |                   |                   |                   |                    |                   |                    |                   |                    |
| Yellow Warbler               | 1                  | 1                         |                    | 7                  |                    | 4                  |                    |                   |                   | 1                 |                    |                   |                    |                   |                    |
| Common Yellowthroat          |                    |                           |                    | 1                  |                    |                    |                    |                   |                   | 2                 |                    |                   |                    |                   | 2                  |
| White-winged Crossbill       |                    | 12                        |                    |                    |                    |                    |                    |                   |                   |                   |                    |                   |                    |                   |                    |

| Species                | Date of Survey     |                           |                    |                    |                    |                    |                    |                   |                   |                   |                    |                   |                    |                   |                    |
|------------------------|--------------------|---------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------|-------------------|-------------------|--------------------|-------------------|--------------------|-------------------|--------------------|
|                        | 09<br>July<br>2007 | 14-<br>15<br>June<br>2003 | 21<br>June<br>2000 | 09<br>June<br>1997 | 08<br>June<br>1994 | 08<br>June<br>1992 | 04<br>June<br>1990 | 26<br>May<br>1988 | 21<br>May<br>1986 | 29<br>May<br>1984 | 09<br>June<br>1981 | 26<br>May<br>1976 | 20<br>June<br>1973 | 07<br>May<br>1971 | 22<br>July<br>1965 |
| American Goldfinch     |                    | 2                         |                    |                    |                    |                    |                    |                   |                   |                   |                    |                   |                    |                   |                    |
| Pine Siskin            |                    |                           |                    |                    |                    | 12                 |                    |                   |                   |                   |                    |                   |                    |                   |                    |
| White-throated Sparrow |                    | 4                         |                    |                    |                    | 3                  |                    |                   |                   | 1                 |                    |                   |                    |                   | 2                  |
| Fox Sparrow            | 3                  | 16                        | 1                  | 8                  |                    | 20-<br>40          |                    |                   |                   | 5                 | 3                  |                   |                    |                   |                    |
| Song Sparrow           | 2                  | 29                        | 5                  | 9                  | 1                  | 10                 | 50                 |                   |                   | 10                | 3                  |                   | 7                  |                   | 25                 |
| Savannah Sparrow       |                    | 4                         |                    | 1                  |                    | 14                 |                    |                   |                   | 10                | Present            |                   | 3                  |                   | 25                 |
| 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. (A. Campbell photo)



Figure 2. North and East walls of CWS cabin. (A. Campbell 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. CWS cabin and remains of former buildings nearby.



Figure 6. NWA signage (Public Notice + NWA Boundary) at landing area.