

Notes

Scoter, *Melanitta* spp., Migrations Interrupted by Confederation Bridge: An Update

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Continued monitoring over 10 years of scoter migrations through Northumberland Strait confirmed that these birds continue to perceive the Confederation Bridge (completed in 1997) as an obstacle. Such problems – and alternatives not causing them – need serious consideration when “strait crossings” are contemplated elsewhere.

Key Words: Scoters, *Melanitta* spp., migrations, Northumberland Strait, bridge, New Brunswick.

While the Confederation Bridge (46°15'N, 63°40'W) linking Prince Edward Island to New Brunswick was being completed in 1997, Hicklin and Bunker-Popma (2001) examined the possible influence of the bridge upon migration by marine birds. They concluded that migrating scoters (*Melanitta* spp., seaducks) were unwilling to fly under the (40 metre high) bridge and often reluctant to fly over it.

Earlier information, recently supported by several studies (e.g. Wilson et al. 2003*), suggested that, in recent years at least, most migrating scoters passing through the Maritime Provinces in spring cross the Chignecto Isthmus 40-50 km. further west and do not approach the Confederation Bridge. Much less is known about their fall migrations.

TABLE 1. Ten years of scoter movement at Confederation Bridge, New Brunswick/Prince Edward Island. Spring (S) and fall (F) totals shown separately for each year.

| Year | | Observation time (hr) | Scoters seen to approach bridge | Scoters seen to pass over bridge* (%) | |
|--------------|---|--------------------------|------------------------------------|--|------|
| 1997 | S | 54 | 731 | 243 | (33) |
| | F | 102 | 876 | 338 | (39) |
| 1998 | S | 15 | 70 | 29 | (41) |
| | F | 49 | 923 | 388 | (42) |
| 1999 | S | 4 | 16 | 0 | |
| | F | 78 | 1495 | 881 | (59) |
| 2000 | S | 35 | 389 | 67 | (17) |
| | F | 74 | 1675 | 859 | (51) |
| 2001 | S | 16 | 212 | 115 | (54) |
| | F | 72 | 906 | 431 | (48) |
| 2002 | S | 18 | 461 | 150 | (33) |
| | F | 70 | 1368 | 725 | (53) |
| 2003 | S | 27 | 604 | 129 | (21) |
| | F | 50 | 1824 | 1274 | (70) |
| 2004 | S | 28 | 515 | 275 | (53) |
| | F | 47 | 1253 | 696 | (56) |
| 2005 | S | 11 | 46 | 6 | (13) |
| | F | 22 | 435 | 156 | (36) |
| 2006 | S | 14 | 124 | 68 | (55) |
| | F | 40 | 1038 | 547 | (53) |
| Totals | S | 222 | 3168 | 1082 | (34) |
| | F | 604 | 11793 | 6295 | (53) |
| Grand Totals | | 826 | 14961 | 7377 | (49) |

* No scoters were seen to pass under the bridge

I monitored seaduck migrations at Confederation Bridge each year since 1997, using procedures of our original study (Hicklin and Bunker-Popma 2001) to see if these birds habituated to the perceived obstacle. Results of these observations, summarized in Table 1, suggest that the majority of scoters still, after 10 years, have not learned a simple, general, way of passing the bridge.

Nearly half of those seen (34% in spring, 53% in fall) circled upwards and passed extremely high over the bridge without landing. Others landed on the water, and remained there, often for hours. Still others followed the bridge towards the opposite shore, and sometimes were lost to sight while still flying. As my observations do not suggest that birds in the two latter categories stay near the bridge indefinitely, presumably they continue their migrations later, but timing of their departures and the routes followed remain unknown.

Given the small fraction of regional scoter populations that approach it, this bridge cannot be considered a major obstacle to their migrations, at a flyway level. Nevertheless, the continuing problem posed to the birds that encounter this bridge needs to be borne in mind whenever and wherever bridges are proposed in loca-

tions traversed by major portions of migratory species populations.

Acknowledgments

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Document Cited (marked * in text)

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Literature Cited

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