

Letter from Peter MacDonald, Wildlife Biologist, Western Region, N.S.
Department of Natural Resources

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I was pleased to learn that the Kingsburg Coastal Conservancy (KCC) is negotiating the purchase of West Ironbound Island, Lunenburg County. As a Nova Scotia Department of Natural Resources Wildlife Biologist, I welcome the initiative taken by your group to acquire this property for conservation purposes, and I am providing this letter in support of your efforts.

While Nova Scotia has an abundance of coastal habitat, we know that our coastal areas are increasingly under threat of development. Some coastal development is inevitable, but providing protection wherever possible becomes a very necessary and important task, especially with most of our coastline being under private ownership. Acquisition of coastal properties by the province occurs occasionally, but only a limited number of properties can be purchased this way. Therefore, it is most encouraging to see groups like yours contribute to such an important role in coastal conservation.

All of our offshore islands are valued as wildlife habitat, as they provide a degree of isolation from human activity and predators, which is generally not available on the mainland. Some islands presently have a greater sensitivity than others due to the presence of rare plant or animal species, or colonial nesting birds which concentrate there for part of the year. However, through the processes of succession and natural disturbances, conditions on any island will change over time so that it may become more suitable for occupation by some species, and less suitable for others. All of our islands, regardless of whether or not they are currently flagged as significant wildlife habitat, have the potential to support wildlife. On those currently developed and occupied by people, the potential is considerably lower.

West Ironbound Island currently supports nesting colonies of great blue herons and double-crested cormorants. Information provided by James Hirtle puts the size of the heron colony at 20 to 25 nests in the 2009 breeding season. This alone makes the island a significant wildlife site. There are only a handful of these colonies around the province, and the concentration of nesting birds makes them extremely vulnerable. The loss of a single colony in any one year could have a dramatic impact on provincial heron populations. Presently the only other large heron colony in Lunenburg County is on Loyes Island in Mahone Bay. Along the coast of Nova Scotia, the next significant heron colonies occur in Halifax County to the northeast, and Yarmouth County to the southwest. Adding to the island's importance, estimates of nest numbers from previous years suggest that the colony may also be increasing in size.

Around 38 double-crested cormorant nests were counted on the island in 2009. Colonies of this species in Nova Scotia are more numerous than those of the herons, but we have conservation concerns for cormorant colonies as well because of their vulnerability.

Great blue herons and double-crested cormorants are tree-nesters, constructing their nests near the tops of relatively mature softwoods. The feeding and defecating activity of the birds tends to kill the aging nest trees over time, so a single colony will last a number of years until suitable conditions are no longer present. As trees gradually disappear on an island, double-crested cormorants will switch to nesting on the ground to some extent, but great blue herons will be forced to seek a new location on another island. West Ironbound Island currently contains roughly 26 ha of predominantly softwood forest. This consists of patches of mature white spruce, red spruce and balsam fir within extensive stands of young and mixed-age trees. Depending on the length of time that mature trees on the island are still available for nesting, much of the younger forest will be older and should provide nesting opportunities as well. This means that, if the forest is left undisturbed, West Ironbound could serve as a productive breeding site for both bird species for many years to come.

The island is also known to support nesting gulls. James has reported the number of nesting pairs in 2009 to be about 100 pairs of herring gulls, and 30 pairs great black-backed gulls. While colonies of nesting gulls on offshore islands in Nova Scotia are relatively widespread, they are also highly vulnerable to predation and disturbance because nests tend to be concentrated and located on open ground.

Several habitats on West Ironbound likely support a number of other bird species. Blackpoll warblers are known to occur there, and yellow-rumped warblers and song sparrows are strong possibilities. It is very likely that black guillemots nest on the rugged rocky shoreline found around much of the island. There also appears to be abundant habitat for Leach's storm petrels, and James reports some evidence that they may be present. A few adult female common eiders with broods of young have been observed on the water in the general area, so eiders may nest in the island's forest interior, using deadfall and undergrowth for cover. They may also nest above the shore if there is sufficient shrub cover left after sheep grazing.

The presence of sheep on West Ironbound presents an interesting situation with regard to the conservation of wildlife habitat. I think that if you were to ask whether or not a continued presence of sheep will affect the island negatively, the answer very much depends on what you want to achieve. A totally hands-off approach with the aim of restoring and preserving the island would require that the sheep be removed. However, "conservation" does not have to be "preservation", and I believe there are ways to accommodate this land-use practice by developing a management plan with a goal of increasing or

maintaining the island's biodiversity. Nova Scotia coastal islands have been used by people and wildlife for a few hundred years, and there are cultural and historical values which I think could be incorporated into a management plan.

The continued grazing of grasses and herbaceous plants, as well as successional species like raspberries, will maintain the large open areas. The degree of impact really depends on how intensively it's grazed, and whether or not the number of sheep ever exceeds the carrying capacity of the habitat. Grazing could actually increase the number of habitats and plant communities present, creating abundant edge and a number of transition zones.

There may be other advantages in maintaining openings and preventing successional species from becoming established. I think this is a large enough island to provide opportunities for ecologically friendly education and recreation activities, in addition to protecting critical wildlife habitat. Ideally, fencing could be used to keep sheep out of some areas which would then be permitted to undergo succession. Any activities would have to create minimal disturbance, or preferably, be limited to the period outside of breeding season. Besides restricting sheep access, fencing could be used to keep people away from sensitive bird breeding areas. The presence of a grazing animal in an island context could also be of value for education and/or research, for example, in comparative experiments looking at grazed and ungrazed habitat.

In conclusion, I would again like to express my support for your efforts to acquire West Ironbound Island, and offer whatever assistance I might be able to provide.

Yours sincerely,

Peter MacDonald
Wildlife Biologist, Western Region
N.S. Department of Natural Resources
P.O. Box 6000
Lunenburg, Nova Scotia
B0J 2C0

(902) 634-7529
fax: (902) 634-7577
Email: macdonpr@gov.ns.ca