

Reconciling Small Scale Protected Area Designation with Local and Traditional Land Uses: two Nova Scotia cases

Glyn Bissix, Department of Community Development and the Environmental and Sustainability Studies Program, Acadia University, Nova Scotia, Canada. glyn.bissix@acadiau.ca

Ross Firth, Director of Conservation, Nova Scotia Nature Trust, Halifax, Nova Scotia, Canada.

The Nova Scotia Nature Trust (NSNT)

Established in 1994, the Nova Scotia Nature Trust (NSNT) is an incorporated charitable conservation organization dedicated to protecting ecologically important natural areas in Nova Scotia, with a focus on rare, outstanding and imperiled coastal and freshwater habitats and the critical habitat of at-risk species. Its vision is for “a future in which Nova Scotia’s native species, and unique habitats and natural landscapes are protected in perpetuity, and in which this natural legacy is appreciated and actively stewarded”. It has been highly successful in securing conservation lands through donation, purchase and conservation easements; however, limited resources are available for ongoing stewardship management. It must, by necessity, rely on local volunteer stewards and strategic partnerships.

The Land Tenure Context

European settlers established permanent settlements in Nova Scotia in 1604 substantially altering and dividing the landscape. Seventy percent was privatized into small private forests and farms with remnant Crownland generally found more remotely. More recent land expropriation by the provincial government to consolidate for national park designation in the nineteen thirties, sixties, and seventies (a failed attempt), engendered government distrust tainting later attempts to designate protected areas.

Given the context of complex land use, traditional recreational uses and natural resource exploitation, protected area designation often clashes with established local practices. This paper examines two such cases, Black Point Beach /Hemeon’s Head on the South Shore and the Wolfville Watershed Nature Preserve, both in Nova Scotia, Canada.

The Two Locations (see Figure 1)

Hemeon’s Head/Black Beach is owned by Acadia University and is located on Nova Scotia’s south shore and is comprised of 46 hectares. A conservation easement between the university and the Nature Trust was signed in 2011. Black Beach contains seven kilometres of undisturbed coastline, supports an endangered breeding bird (the piping plover) population and adjoins the adjacent Matthews Lake property belonging to the NSNT. Together, the properties equal 125 hectares of diverse and significant coastal barrens, bog wetlands, salt marsh and sand dunes, with habitats used by waterfowl, shorebirds, and migratory birds, including three provincially and federally listed species at risk. Its ecological value is under threat from all terrain vehicle (ATV) activity, particularly within the cobbled dune system where piping plover breed, and other traditional uses not strictly compatible with conservation objectives.

The Wolfville Watershed Nature Preserve is a 243 hectare property owned by the Town of Wolfville (TOW), previously used as a water supply and is located 10 kilometres from town. A conservation easement between the Town and the Nature Trust was signed in 2007 and was the first of its kind in Canada between a municipality and a land conservation trust. Its most significant conservation value is an old growth hemlock forest. The surrounding

landscape has been highly altered through agriculture and logging resulting in no nearby government protected areas. This site includes several popular trails primarily used by walkers, but there are other recreational uses, some condoned, and others notionally prohibited. Hunting is prohibited, however, there is evidence of a hunting blind just off property pointing toward the Preserve.

Study Methodology

A goal of NSNT is to establish feasible management plans that garner local support and ensure long term ecological integrity. For Black Beach a management plan was to be developed and for the Wolfville Watershed an established plan was to be reviewed. In both cases, applied research courses within the Environmental and Sustainability Studies Program at Acadia University were commissioned to conduct preliminary human dimension analyses and make recommendations. In both cases, historical and contextual analyses were conducted, supplemented by on-site orientations. For the Black Beach case, an issue orientation was also provided by a local conservation champion which was followed by a townhall type meeting, and a small number of semi-structured interviews. For the Wolfville Watershed, a narrated PowerPoint and a podcast was reviewed prior to the field visit, and several semi-structured interviews were conducted.

Findings

Both sites showed obvious physical evidence of non-conforming use and site degradation was evident from ATVs primarily in the form of an extensive trail network. The South Shore beach was strewn with ocean debris, none of which could be attributed to site users. Matthews Lake was accessed by subsistence clam diggers on ATVs and there were numerous other ATV tracks. A gravel road through the Watershed property, once a public road, provided convenient off highway vehicle access to distant trails.

Conservation Management Issues

Broadly speaking, the conservation challenge in both locations boil down to how far can the NSNT and landowners manage the sites for conservation objectives, condone prescribed recreation uses, manage non-conforming use, and tolerate traditional consumptive uses without compromising the ecological integrity of the sites? This must exist without active, on-site management.

Given a dearth of management resources, a second related issue is the extent to which local volunteers can be recruited to monitor use and to promote conservation, particularly considering the potential for conflicting and adversarial behaviours. It is important to note that local conservation champions must co-exist with neighbours some of whom have quite different land-use aspirations.

Conclusions and Recommendations

Both studies provided preliminary insights into the human dimensions of small scale conservation challenges in rural areas. It became clear in both situations that to promote biophysical conservation goals, full adherence to prescribed uses must at best be aspirational rather than rigidly applied. Even in relatively small-scale conservation areas, the human dimensions are complex and sometimes adversarial.

At Black Beach, subsistence clam diggers' livelihood could be adversely impacted by a no harvesting regime. Duck hunters, whose families have hunted this area for generations, would likely oppose a hunting ban while Piping Plover conservationists' work can be undone in a moment by ATVs or a marauding dog. A nature lover's hope for a tranquil hike along the beach can be shattered by noisy ATVs, and some recreational ATVer's are indiscriminate in choosing places to play. In the Wolfville Watershed mountain bikers who invested many hours developing trails, building jumps and laying bridges, found their work dismantled and displaced. And ATVer's who have used the trail through the Preserve for decades, push back by cutting new trails around newly erected trail gates. Informational signs disappear or are damaged.

While the analyses are preliminary and require more in-depth field analyses, particularly focusing on local residents' aspirations, and conforming and non-conforming users; it is clear that the stewardship plans must be sensitive to local realities, if neighbours are to become conservation stewards.

References

Nova Scotia Nature Trust (2017). The Wolfville Watershed Nature Preserve: PowerPoint Presentation. NSNT: Halifax, Nova Scotia.

Nova Scotia Nature Trust (2016). Matthews Lake and Black Point Beach: Power Point Presentation. NSNT: Halifax, Nova Scotia.



Figure 1: The Two Nova Scotia Nature Trust Sites: Top left, Wolfville Watershed Nature Preserve Site Map; Bottom left, the Old Growth at the Wolfville Watershed; Top right, Hemeon's Head Site Map; Bottom right, Hemeon's Head showing ATV Tracks; Bottom inset, Map of Nova Scotia with site locations and Canada inset highlighting Nova Scotia