

## Tick Spread Monitored

Based on articles by Jeff Ogden in Insectary Notes, Fall 2008

According to Jeff Ogden in his October article in the Insectary News, the NS Dept of Natural Resources is examining the potential risk of blacklegged tick-infested hides from deer shot in areas of Lunenburg County being transported throughout the province. Working with Dr. Robbin Lindsay of the Public Health Agency of Canada in Winnipeg, Jeff hopes to determine how long ticks remain on the dead animals, how many fall off and how long they can survive away from the host. The aim is to quantify the risk of the spread of the black-legged tick as a carrier of Lyme disease in Nova Scotia.

In the November edition of Insectary Notes, Ogden noted his tick ID program was showing new establishments of the Black-legged Ticks in Pictou County, Antigonish County and a small area in Yarmouth County, as well as from the known areas in Lunenburg, Bedford and Gunning Cove and previously surveyed sites in Queens County. Stay tuned to the Insectary Notes if you are looking for future updates on this interesting project.

## When Two Become One: The Loss of a Canadian Endemic

By Aaron Shafer  
March 6, 2009.

It would be safe to say that most of you have never seen (or even heard of) the Gaspé shrew. This inconspicuous insectivore is slate grey in colour and



Aaron Shafer and Don Stewart studied the elusive Gaspé shrew

makes its living in the talus slopes of the Gaspé peninsula, New Brunswick, and Cape Breton Island. Once considered a species of special concern by COSEWIC, this little critter is among the least studied and most difficult mammal to catch in the wild.

For my MSc at Acadia University, under the guidance of Don Stewart, we decided to study the elusive Gaspé shrew. Questions had arisen about the taxonomic validity of the Gaspé shrew; and a recent study suggested the closely related long-tailed shrew was in fact its conspecific. Therefore, using molecular data we set out to re-



Top to bottom, *Sorex dispar*, *Sorex fumeus* and *Sorex cinereus*

evaluate the taxonomic status of the long-tailed and Gaspé shrews.

Thanks to our collaborators we had many samples on hand; however, Don and I aspired to collect additional specimens from Nova Scotia. With our good luck charm (John Gilhen of the Nova Scotia Museum who has been capturing these rare shrews for nearly three decades!), we successfully collected 6 specimens of the long-tailed and Gaspé shrew in total. These trapping data improved our knowledge on the range, density, and ecology of these shrews.

Back in the lab at Acadia, we utilized two molecular markers to assess the degree of genetic differences between these two species, and whether a separate species status was warranted. Looking at approximately 30 samples from across the entire range of both shrews, we found evidence that the long-tailed and Gaspé shrew belonged to the same, genetically indistinguishable group. These data, accompanied by morphological evidence from our collaborator Judith Rhymer, led us to recommend merging these two taxa into a single species. Our

findings also provided valuable insights into the historical biogeography of Atlantic Canada. Therefore, it is with some despondency, that our results report the loss of species status for Atlantic Canada's Gaspé shrew.

For a more in-depth read of our study see:

Shafer, A.B.A., Scott, F.W., Petersen, S.D., Rhymer, J.M. and D.T. Stewart. 2008. Following the SINEs: a taxonomic revision of the of the long-tailed shrew complex, *Sorex dispar* and *S. gaspensis*. *Journal of Mammalogy* 89: 1421-1427.

Shafer, A.B.A. and D.T. Stewart. 2008. A population crash of the red-backed vole (*Myodes gapperi*) in Nova Scotia inferred from bycatch of the long-tailed shrew (*Sorex dispar*). *Northeastern Naturalist* 15: 626-629.

Shafer, A.B.A. and D.T. Stewart. 2006. A disjunct population of *Sorex dispar* (long-tailed shrew) in Nova Scotia. *Northeastern Naturalist* 13: 603-608.

## NB Crown Forest Biomass Harvest

by Rosemary Curley  
March 10, 2009

The New Brunswick government has issued a request for proposals from parties interested in gaining access to biomass material from Crown forests. According to Natural Resources Minister Wally Stiles "Industry has expressed a great deal of interest in acquiring access to forest biomass for green energy projects." An estimated 550,000 oven-dry metric tonnes of biomass material can be allocated, with the volume of material available in any given year dependent on the amount of wood harvested that year. Forest biomass consists of the parts of a tree not traditionally used such as branches, tops and foliage. A forest biomass harvesting policy and tools to ensure sustainability of the harvest are part of the plan.

Mark Arsenault, president of the New Brunswick Forest Products Association welcomed the announcement saying "This is an important step in helping