

## 2001 NATURAL HISTORY SOCIETY EXECUTIVE COMMITTEE:

The Natural History Society of Prince Edward Island's 2000 Executive Committee was re-elected at the Annual Meeting held on February 6, 2001. The members present at the meeting expressed their appreciation for the work the Executive has done on their behalf. Congratulations go out to Ben Hoteling (president), Jim Jenkins (Vice-President) Lois Doan (Secretary), Michelle Johnston (Treasurer), Meike Keunecke (Director for programs), Eric Marcum (Director, assistant for programs), and Ray Cooke (Past-President).

### INVASIVE PLANTS:

by Kate MacQuarrie

*"A mine that modified the landscape on a similar scale [as invasive plants] would be subjected to intense scrutiny by the environmental impact assessment process and would probably not be approved".*

- W.M. Lonsdale writing in the Australian Journal of Ecology, 1994.

Invasion by non-native plants is now believed to be second only to land development as the greatest threat to biodiversity on both a local and global scale. Although high-profile problematic introductions such as the European green crab or brown spruce longhorn beetle have focussed attention on non-native animals recently (eg. *Issue #156 of Island Naturalist*), the general public remains largely unaware of the biological and economic impacts of non-native plants.

Of course, not all non-native plants are problems. About 900 species of non-native plants have become established outside of cultivation in Canada, but only 6% of these are considered invasive (spreading into natural habitats). Unfortunately, these few dozen invasive species can incur huge biological and economic costs. In Canada, nearly 60% of our National Parks - including remote, wilderness areas - report non-native vegetation as causing significant ecological impacts. Nearly 20% of plants on the national endangered species list are threatened by non-native species. The United States alone spends as much as \$5.4 billion annually to control non-native plants, and has seen native plant communities displaced in more than 437,000 km<sup>2</sup> of grasslands and wetlands (that's an area about 77 times the size of PEI, or nearly as large as the Yukon Territory). While displacement of native plant communities and spread of disease are some highly-visible impacts of non-native plants, less obvious impacts include alteration of fire regimes, and ecosystem-level changes such as alteration of productivity and energy flow. Despite the huge amount of money spent on control, more than 500 million non-native plant individuals are imported to North America each year.

Although it was once thought that natural, complex habitats such as mature forests were more resistant to invasion, it is now known that even highly diverse and relatively undisturbed ecosystems can be threatened by non-native species. PEI's habitats have a long history of human use, and so it is not surprising that 33% of all our plants are non-native and some of these species are invasive. Most people are aware of the notorious purple loosestrife (*Lythrum salicaria*), but the Island has other invasive species as well. For example, ground ivy (*Glechoma hederacea*) and creeping buttercup (*Ranunculus repens*) have escaped domestication and are now common in habitats such as along streams and in wet woodlands where they can become the dominant vegetation. Hawkweeds (*Hieracium* spp) and common speedwell (*Veronica officinalis*) have invaded even relatively undisturbed forests, where they extend well into the interior. For easily found, graphic examples of



HIERACIUM AURANTIACUM