

## **Island biodiversity at risk**

Mention the Galapagos to anyone, and it conjures Discovery Channel images of isolated islands populated by strange animals found nowhere else. Most of us are also aware of the role the Galapagos as living evidence of species adapting and diverging on neighboring islands. We are fascinated, and support efforts to protect the biodiversity of the Galapagos and isolated ecosystems elsewhere in the world. But we seem oblivious to the fact that we live in an archipelago ourselves.

In its haste to establish green credentials with respect to marine stewardship, San Juan County has completely neglected terrestrial biodiversity. This is most unfortunate: not only are there many very rare and unusual animals and plants on our islands, but we have far greater control over the fate of the uplands than on the marine environment.

How many county residents are familiar with the Propertius duskywing butterfly, the Northwestern salamander, or yellow-flowering locoweed? Do we even know whether Western toads still prowl our hills, or if Indian rice-root still grows on Orcas, where the British botanist Alexander Menzies first observed its dark brown flowers in 1792? Our recently documented Northern flying squirrels and Coastal cutthroat are almost certainly genetically distinct from their mainland cousins. The county has taken highly publicized steps to protect killer whales and eelgrass habitats, but thus far has no current inventory or conservation plan for upland animals or plants. As one of the state's fastest-growing counties, our landscape continues to change at least as fast as our marine waters.

Competition from invasive non-native species is a growing threat to the islands' distinctive ecosystems. County residents have been mobilized from time to time to try to eradicate state-targeted invasive species such as *Spartina*. But non-native animal and plant species are introduced into the county willy-nilly every year without any effort to manage or even monitor the influx. Most introductions are private, unofficial and undocumented: For example, Eastern gray squirrels and Appalachian Fox squirrels that will compete with our native Douglas squirrels and Townsend's chipmunks; bullfrogs that efficiently extirpate other amphibians and small freshwater fish; and Brook trout that feast on eggs of Pacific salmon and Coastal cutthroat.

Even public agencies are responsible. Washington State plants non-native fish in our lakes and ponds every year; and the conservation district's annual "native plant sale" includes species that are not native to the islands, and mainland stocks of species that are native here. Why are public agencies not protecting and promoting what already grows in the islands? Instead, they are subsidizing the loss of local genetic resources.

At the same time, we must appreciate the fact that San Juan County had already been shaped extensively by human activity before the Hudson's Bay Company arrived. We are just beginning to understand the extent to which Coast Salish peoples introduced plants and animals to these islands for millennia. They also probably left behind many

distinctive “heirloom varieties” of cultivated species such as camas that contribute to the unique character of contemporary island plant communities.

Citizens will soon have an opportunity to address these issues. San Juan County is about to update the wildlife and critical habitat chapters of its Critical Areas Ordinance. It’s time to appreciate our islands’ unique but rapidly changing ecosystems, and manage our distinctive biodiversity with the kind of vigilance it deserves.

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