



Lights and Shadows from the Dishman Hills, October 2000

HOWDY HOWELLIA

There is a very small plant with a very big significance in the Natural Area. It's the water *Howellia*, or *Howellia aquatilis* of the Harebell family. This rare plant is a threatened and endangered species, and is afforded some special considerations when it comes to land management. There are only two population clusters of *Howellia*, both in the Northwest. The plants show a low genetic variation between populations indicating that they "bottlenecked", meaning that the present population is a result of a few survivors of the last hard times for the plant. Efforts to transplant *Howellia* have not been very successful, and it seems that they need a very special microenvironment that is not fully understood. These rare plants and their environment are protected by law, and is a major reason that the State and national organizations, such as The Nature Conservancy, take a active interest in the Dishman Hills.

The plant grows only in diurnal ponds, that maintain a cycle of wet and dry during different parts of the year. A shady, small, shallow, pothole pond with lots of organic material on the bottom is just right. *Howellia* starts its growth season underwater when a delicate stem with long leaves rises to the surface. It may detach from the bottom and continue to grow free floating, receiving nutrients directly from the pond water. The plant reproduces entirely by seed. The flower is self pollinating, and flowers and fruit can form both at the surface and underwater. The fruit germinates in the Fall when the pond is dry, with the small plant waiting for the water and warmth of the following Spring to restart the growth cycle. Variations in the wet/dry cycle affects the population size, so there are good years and bad years for the plant numbers. *Howellia* does very well in shady or murky water conditions, giving it an advantage over other plants. In short, it is a very specialized plant that depends on the stability of the environment it has adapted too. The invasion of noxious weeds is a notable threat to the *Howellia* community. The plants environment of small ponds is often effected by farming, ranching, development, and recreation.

Management methods for the endangered plant seems to vacillate between fencing and signing around the plant habitat for protection, and just not mentioning anything about it, hoping the plant will be left alone if nobody knows about it. The DNR botanist who provided the information for this article was especially concerned about the general public being informed of this fascinating, and rare plant in the Hills for fear that the plants would suffer. We think that protection of *Howellia* is part of the Associations commitment to put the environment first, and we expect all of you out there to leave this plant alone, stay out of the pond bottoms when they are dry, and encourage others to do the same. Some day it may be necessary to take more drastic measures to protect *Howellia*, but for now we are counting on our current policies to provide enough protection.

COUPLET IS DONE

The new Sprague Couplet roadway opened this month culminating a decade of efforts by the Association to assure minimum damage to the environment. Four lanes of traffic now skirt the northern boundary of the Natural Area, and already additional problems of motor vehicle incursion, and extra trash dumping have appeared, as we forecasted. There is a big job ahead to convince the County to complete the road job by putting in vehicle barriers where needed between the new roadway and the Natural Area.

Plans to add some 20 acres of additional County land to the Natural Area to compensate for environmental damage done by development, is still on track. County Commissioner John Roskelley went to bat for the Dishman Hills on this issue and we should all be thankful for having such an advocate in the County government. The reclamation of the toxic dump just north of Camp Caro is about done with the most notable feature a new sump pond to accept drainage off the capped dump.

ORGANIZATION NEWS

We are a non-profit organization dedicated to saving nature areas in the Spokane region for public enjoyment and education. Call Michael Hamilton, 747-8147, if you have any questions. We have a monthly meeting the third Tuesday of the month at Opportunity Elementary School, in the teacher's lounge, S. 1109 Wilbur, 7pm.

The following are our September donors that have consented to be listed: Barbara Bailey, Frieda Froth, George Girvin, Memorial for Gail Lambert (8 donors), Mary Lentz, Helen Lininger, Jacqueline Mallereau, Leo Middledork, Marilyn Miller, Marion Phillips, Francis Potter, Jane Rogers, and Lois Smith

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