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# *information crossfile*

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Discovery of a rare protein found in some wild beans but absent in common cultivated varieties is reported in **Science News** (Vol. 33, p. 246) and underlines, according to researchers, the importance of current efforts to preserve the genetic diversity of earth's plants.

The protein, which has been analyzed and cloned in a collaborative effort involving plant breeders, entomologists, and molecular biologists, can protect against an important bean pest. The protein is called arcelin and is closely related to the more common phytohemagglutinin, or PHA. Although PHA has some insecticidal qualities, it has tested as ineffective against two common varieties of bean-destroying weevils. Researchers report that arcelin, in contrast, is highly toxic to bean weevil larvae.

The discovery focuses attention on the problems that may result as modern agricultural practices and global development narrow the range of genetic variation. Thomas C. Osborn, a researcher at the University of Wisconsin, Madison, reported the discovery in the April 8 **Science**. He told **Science News** that the new protein, with its important implications for the world's food supply "is a good example of the need to preserve wild germ plasm."

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Researchers in Hawaii are trying to build "an acoustical phylogeny" of the islands' *Drosophila* flies, some species of which are unique to the islands. **Science News** (Vol. 133, p. 244) reports on the efforts of several scientists to relate the song style of a species to its place in evolution.

Four song types are reported: a click-song, a complex pattern of short pulses followed by a trill, a purr made up of steady/sound pulses, and a low hum. Ronald R. Hoy of Cornell University says the larger Hawaiian cousins are more flamboyant in both appearance and communication skills than their continental cousins. Some biologists estimate that more than 500 different *Drosophila* species have evolved on the islands, producing flies not

found anywhere else on earth. Evidence supports the one-original-fly idea, says Hoy – a fly blown in from the mainland whose offspring then island-hopped to start new colonies. “However it happened,” says Hoy, “it is certainly the case that these *Drosophila* evolved from mainland species.”

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The Committee for an International Wolf Center is proposing the creation of such a center in Ely, Minn., according to word from Mike Link, chairman. In a brochure subtitled “Wolves and Humans: Coexistence, Competition and Conflict,” (available from the International Wolf Center, c/o Vermilion Community College, 1900 East Camp St., Ely, Minn. 55731; (218) 365-3256), Link traces the Committee's work since its formation in 1984. The 1988 legislative initiative in Minnesota would establish in Ely a home for the Science Museum of Minnesota's Wolves and Humans exhibit. The central mission of the International Wolf Center would be a public education program that would offer a wide variety of efforts and affiliated educational institutions.

“A multifaceted educational delivery system will be used by the Center to ensure broad public exposure to the wolf and related species both at the Center and through the Center's extension programs and speakers' bureaus.”

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## **The Historic Resources of the U.S. Virgin Islands**

is the title of a 58-page review and assessment prepared by the NPS Caribbean Strategy's Cultural Resource Group.

The working group, chaired by Ro Wauer, NPS resource specialist, identified the key cultural resource issues that fall under the purview of either the federal or territorial governments, assessed those issues to determine what must be done to mitigate or prevent further resource degradation, and laid plans to build a constituency so that useful followup action would be forthcoming.

The booklet consists of 19 cultural resource elements that incorporate brief descriptions of the issues, pertinent management objectives, proposed corrective measures, and the kind of funding required.

Also contained are tear-out pages so that readers may send their comments to the working group for input into the process. The document is available from Wauer, Cooperative Extension Service, College of the Virgin Islands, P.O. Box L, Kingshill, St. Croix, USVI 00850; (809) 778-0246.