

Federal, State and University Partnership in Wisconsin

A vigorous, ongoing collaboration between the University of Wisconsin (UW), the Wisconsin Department of Natural Resources (WI DNR) and the USGS National Wildlife Health Center (NWHC) has endured for over 25 years.



When NWHC was started by the relocation of federal wildlife disease investigators from Colorado, Utah, North Dakota and Maryland in 1975, the Center's first 'homes' were UW's Stock Pavilion and the State's Central Animal Health Laboratory. Federal employees located at these facilities shared space with University and State personnel and began a long tradition of working together to combat wildlife disease, in Wisconsin and across the country.

Chronic Wasting Disease (CWD), a neurological disease of deer and elk, recently spread from isolated cases in the western United States to Wisconsin's wild deer herd. Public concern over health and safety – and the future of the deer herd – is intense. Collaborative efforts with UW and the WI DNR focus on disease dynamics in Wisconsin's intensive harvest zone, development of predictive models to document current distribution and estimate future spread, and processing of samples from the initial surveillance on Department of Interior lands. The Wisconsin Diagnostic Services Laboratory and NWHC are developing a joint facility to conduct tests on brain and lymphatic tissues.

West Nile Virus, a mosquito-borne virus first documented in the Western Hemisphere in 1999, has spread rapidly across the United States over the last 3 years. Humans, other mammals and birds are all at risk from the virus. In Wisconsin, NWHC and the WI DNR are working with the Wisconsin

Division of Public Health to coordinate investigations of WNV in the state.

Coordinated efforts by the International Crane Foundation (Baraboo, WI), WI DNR, NWHC and a number of other agencies are concentrating on the establishment of a second migratory flock of whooping cranes, traveling from Necedah National Wildlife Refuge in Wisconsin to Florida. Other efforts focus on threatened species like the gray wolf and the bald eagle. NWHC personnel perform post-mortem examinations on wolf carcasses, work with WI DNR staff on the wolf recovery plan and collaborate on research projects promoting wolf population health. Examinations of carcasses and tissue samples submitted by WI DNR personnel and local veterinarians are helping to identify the cause of recurring eagle mortality events along a stretch of the Wisconsin River.

Educational collaboration is an essential part of the partnership. NWHC funds a number of graduate research assistantships and post-doc positions through UW for work on CWD, avian cholera, sea otters, iridoviruses, botulism and other wildlife diseases, not only at the Madison campus but at UW-LaCrosse as well. A training agreement with the Department of Pathobiology supports a veterinary pathologist training in wildlife disease at NWHC. Externs from the UW School of Veterinary Medicine receive specialized wildlife health training at NWHC. Five NWHC personnel serve

as adjunct professors, teaching courses or lecturing in other courses, serving on graduate committees and as co-advisors for students, and working on collaborative research. The tradition of sharing space has continued, facilitating collaboration and scientific exchange: one NWHC scientist has space at the UW Institute for Environmental Studies, while graduate students, post-docs, and staff from the School of Veterinary Medicine have office and lab space at NWHC.

Efforts reach beyond the wildlife arena. The UW Division of Information Technology is working with NWHC personnel and the Wildlife Information Network to develop new architectures for web-based data structures and to increase the utility and accessibility of information for a world-wide audience. The initial focus is on wildlife disease, but the work is applicable to many fields. UW and the WI DNR are also founding partners in the National Biological Information Infrastructure's Wildlife Disease Information Node. This unique effort will provide a tool for rapid detection and response to wildlife disease outbreaks, as well as a way to monitor possible human health threats from wildlife disease and/or bioterrorist attacks.

Partnership is a long tradition in Wisconsin. UW, the WI DNR and NWHC are working together to fight wildlife disease and promote wildlife health.

For more information on these activities, please contact Christine Bunk, Deputy Director, USGS National Wildlife Health Center, (608) 270-2407, <http://www.nwhc.usgs.gov>.