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Where Do They Fit?

OFTEN OVERLOOKED, PRIVATE SECTOR WILDLIFERS PLAY A GROWING ROLE IN CONSERVATION

By Lynn Braband, Paul D. Curtis, Michael S. Fishman, Tim L. Hiller, and Stephen M. Vantassel

Private sector biologists have existed since the genesis of the wildlife profession in North America. In the past few decades, with increasing societal and legal frameworks and a growing number of human-wildlife conflicts, the number of private sector wildlife professionals and organizations has risen dramatically.

Today, they comprise a significant portion of the wildlife profession. Surveying online records of current members of The Wildlife Society, we found the number of active members in the private sector roughly equaled those in federal agencies. About a third who are certified work in the private sector, particularly in for-profit operations. Yet wildlife biologists working in both for-profit and nonprofit organizations are often overlooked.

The keystone of the North American Model of Wildlife Conservation is the public trust doctrine, which holds that wildlife is the property of the citizens. Government agencies serve as trustees to conserve wildlife for current and future generations. Academia provides a supporting role in research and education.

▼ Staff members with Ducks Unlimited's rice stewardship program set up a flow meter to run a pump efficiency test for a rice farmer.



Credit: Andi Cooper, Ducks Unlimited

Where does the private sector fit in?

Reaching the grassroots

Nonprofit research and management organizations – part of the private sector – are growing and increasing in importance. Ducks Unlimited, the National Wild Turkey Federation, the Quality Deer Management Association, Pheasants Forever and the Ruffed Grouse Society are just a few of the organizations dedicated to protecting and restoring habitats. Important both nationally and internationally, they work in partnership with government agencies and private landowners, often operating at the grassroots level where it can be difficult for government agencies to play a role.

With a focus on habitat management, these organizations provide technical guidance and resources for landowners interested in promoting wildlife and their habitats. They provide seed mixes, training workshops, educational programs and other hands-on activities, and they have active public educational functions that support the spirit of both the North American Model and the public trust doctrine.

These organizations provide important resources for landowners, hunters and other stakeholders who have a strong interest in wildlife conservation. Over the last three fiscal years, Ducks Unlimited and Ducks Unlimited Canada have annually conserved more than 368,000 acres of wetlands. Their sister organization, the Wetlands America Trust, has placed more than 400,000 acres of private land in conservation easements.

Working with agencies

Some private sector research organizations contract primarily with state and federal wildlife agencies to conduct research, such as the Wildlife Ecology Institute's work with the Oregon Department of Fish and Wildlife and others to conduct research on Sierra Nevada red foxes (*Vulpes vulpes necator*). A rare montane subspecies, the foxes are garnering public interest in Oregon and California, yet data are lacking.



By working with a private nonprofit, Oregon can get applied research on threats to population recovery without having to fit the project within the confines of a university system, where time frames may be limited by student schedules and faculty may often focus on more trendy, complex statistical approaches than the practical application and usefulness of results (Brennan 2012).

Since few nonprofit research organizations operate at the national level, many in our field aren't aware of the services they can provide. Yet as universities move away from applied research, agencies need to bridge the gap between research and management and new collaborative efforts to support their responsibilities under the public trust doctrine.

A substantial opportunity exists for private-sector nonprofit research organizations, as long as they are appropriately staffed, understand agency culture and can breach certain barriers to success. Frequently nonprofits are more flexible than universities and agencies, with fewer internal institutional restrictions. They need policies to guide their operations and must meet legal obligations to operate as nonprofits, but they are not subject to restrictions on sourcing vendors and they lack complex bureaucracies.

They do face challenges, but those are similar to the risks that confront any startup business. Wildlife professionals may lack the business skills and training necessary for a private business, and as private businesses, they lack the state-provided funds for capital expenditures that are provided to public universities. Universities may certainly face budgetary constraints from time to time, but they are not subject to the same challenges that nonprofits face.

Not so different

The for-profit sector includes consulting firms, training companies, land management biologists and providers of wildlife damage management services. Since these firms work in their clients' or shareholders' interests, they are occasionally — and often unfairly — characterized as undermining the public trust doctrine. Staff members with agencies and conservation organizations often view consultants as adversaries. After all, they literally sit across the table with clients proposing land uses that can potentially threaten wildlife resources.

However, the consultant's role does not materially differ from that of agency biologists, academics or



Credit: Tim Hiller

◀ The first Sierra Nevada red fox is captured and radio-marked in Oregon as part of a research partnership between the Oregon Department of Fish and Wildlife and the Wildlife Ecology Institute.

nonprofit biologists. They are facilitators who advise their clients on how to comply with regulatory requirements, and they often are deeply involved in project design to meet that end. They may be the first biologists to survey and record the plant and wildlife resources on otherwise inaccessible private lands, adding new data layers to our understanding of species distribution and habitat suitability.

A Call for More Regulation

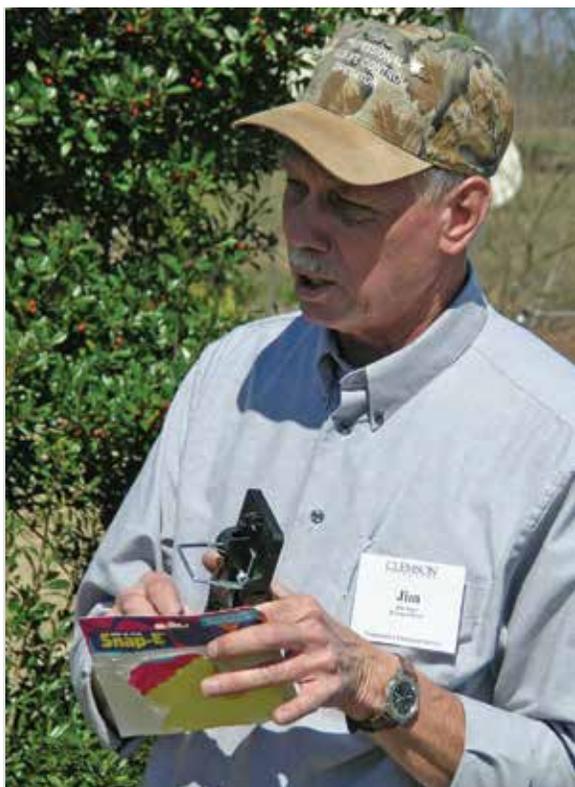
Although the wildlife control service industry has grown and matured over recent decades, state wildlife regulations often manage wildlife control businesses based on hunting and trapping regulations. Some wildlife control operators worry a lack of regulatory oversight may harm the public and impact wildlife management. These efforts seek to ensure professionalism:

National Wildlife Control Operators Association: A nonprofit trade association dedicated to improving standards through advocacy and certified training. NWCOA's training courses are becoming recognized by government agencies. Its "Find a WCO" site assists homeowners in searching for wildlife control operators with industry certification.

National Wildlife Control Training Program: Universities have partnered with state agencies and wildlife control operators to bridge the gap between private industry and state wildlife professionals by developing this program. Faculty and staff from Cornell University and the University of Wisconsin-Stevens Point partnered with wildlife agencies to create state-specific training manuals and online courses that meet state requirements for certification and licensing. These professional certification and training resources help to ensure that wildlife control operators understand wildlife damage management principles and their states' regulations.



► Professional wildlife control operator Jim Soper demonstrates trap sets at a wildlife damage workshop in South Carolina. Both public and private sector wildlife damage management professionals regularly participate and make presentations in each other's meetings.



Credit: Paul D. Curtis



Credit: Tim Green, Brookhaven National Laboratory

▲ Consulting biologists contribute to wildlife research through their projects. Here, Michael Fishman measures and weighs a bat during the Long Island Century Bat Survey, a collaboration he coordinated among several federal and state agencies, universities and his consulting firm to inventory bats on Long Island.

Private consultants are often in a position to more effectively promote regulatory compliance and conservation than agency or nonprofit biologists, as they are often directly involved in the conceptual development and design of land use projects. They may have a direct influence on the practical compliance of land use with regulatory requirements, as well as best management practices for resource conservation.

One consultant worked with two different land developers in New York to acquire and protect under conservation easement the two largest and most significant hibernacula in the Northeast for the endangered Indiana bat (*Myotis sodalis*). State and federal agencies couldn't have undertaken this on their own. The consultant and developer offered to protect the first site themselves. State and federal wildlife agencies agreed, with input to the terms of the conservation easement. When they learned a property containing two entrances to another hibernaculum was for sale and the site was in jeopardy, the agencies suggested protections for it as well. The consultant proposed the idea to the other developer, who willingly purchased the land and placed it under a conservation easement administered by a local land trust. Both projects benefitted an endangered species, conserving important lands in perpetuity for the public trust.

Serving the public trust

Consultants are often practitioners who conduct original field studies and research, contributing to the base of knowledge that supports wildlife manage-

ment from a purely practical bent. They often play the role of academics, collecting and interpreting data on effective conservation measures for application in the field. Their clients pay for conservation measures to benefit wildlife in the public trust so that proposed land uses comply with regulatory requirements and are sustainable in the long-term.

These measures often include conservation easements or land restoration projects that would not be feasible if they relied on cash-strapped public agencies. As a result, wildlife consultants serve as facilitators. They help transform economic development into public trust wildlife habitat benefits, conservation, restoration and protection while advocating for reasonable and sustainable land uses. They also advocate for conservation, educating their clients about laws, regulations and best management practices.

Their novel approaches can help clients achieve development goals that comply with regulations and support the North American Model. In some ways, a consultant's role implementing the North American Model and the public trust doctrine is a combination of the agency biologist, the academic biologist and the nonprofit biologist, but from a slightly different point of view.

Wildlife damage management

The wildlife damage management industry has experienced substantial growth since the 1980s. These operations vary in size from sole proprietors to large,



multi-office franchises. They range from generalists handling common nuisance wildlife situations to specialty companies that provide niche wildlife management services, such as wildlife hazard avoidance at airports, crop and livestock protection and wildlife damage prevention at golf courses.

The National Wildlife Control Training Program formed to develop occupational standards. Professional trade groups, such as the National Wildlife Control Operators Association, have emerged. A trade journal, *Wildlife Control Technology Magazine*, covers news in the field. Regular training and networking events take place at state, regional and national levels.

Private sector professionals bridge the gap between state wildlife agencies and citizens in need of wildlife management services. Trained and licensed, these professionals help states provide wildlife damage mitigation while meeting the regulatory oversight and resource protection that the public trust doctrine requires.

An excellent example of outreach that provides a public service and benefits wildlife is a snake identification “hotline” developed by a Virginia-based operation. Recently highlighted on [TWS’ website](#), it promotes snake conservation by responding to hundreds of texts and pictures received daily from throughout the country, distinguishing venomous from nonvenomous species.

A vital role

Government agencies play an important and historical role, but by serving their clients and the public, private sector wildlife professionals also support the North American Model. They fill important gaps that agencies and academia often cannot — a fact that should be recognized and supported by TWS members and all of us who are passionate about wildlife conservation and management.

TWS programming should address the needs of private sector professionals. We should encourage private sector biologists to join TWS and support the profession. Professional relationships between public agencies and private sector organizations should be maintained and expanded.

Wildlife biologists in the private sector are our colleagues, and they often have similar backgrounds, research experiences and education as agency staff or academics. In fact, it’s not uncommon for private

Table 1. Number of TWS Members Involved in Various Vocations, Based on a Survey of Self-Reported Membership Records Accessed June 2017 (n= 5,259).

State/Provincial	1592 (30.3%)
Federal	1408 (26.8%)
University	828 (15.7%)
Nonprofit	446 (8.5%)
For-profit (consulting firm, corporation, self-employed)	985 (18.7%)

Table 2. Number of Certified and Associate Wildlife Biologists®, Based on a Survey of Membership Records Accessed June 2017 (n= 1,301).

State/Provincial	386 (29.7%)
Federal	320 (24.6%)
University	175 (13.5%)
Nonprofit	95 (7.3%)
For-profit (consulting firm, corporation, self-employed)	325 (25.0%)

sector biologists to have previously served in agency or academic positions, or both. We should all strive for the good of wildlife resources, promoting conservation and reducing conflicts between people and wildlife no matter what our role might be or who employs us. ■

The incentive for this article came from a symposium, “Private Sector Wildlife Biologists and the North American Model of Wildlife Conservation,” at the 25th Annual Conference of TWS in Cleveland.



Credit: Walt Neilson

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