Recovery Goes Continental—How Three Countries Overcome Border Barriers

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Abstract: North America's political boundaries often create difficulties for biologists and managers in the recovery of species at risk. To facilitate conservation of species shared among Canada, Mexico, and the United States, governments of the countries developed several agreements in the 1990s, including three that will be explained here. The purpose of these agreements is to facilitate and enhance cross-border collaboration on recovery initiatives. The Canada/Mexico/United States Trilateral Committee for Wildlife and Ecosystem Conservation and Management brings the federal conservation agencies of the three countries and other stakeholders together to identify and remove obstacles to conservation. Conservation efforts for the California condor (*Gymnogyps californianus*), burrowing owl (*Athene cunicularia*), black-footed ferret (*Mustela nigripes*), and Sonoran pronghorn (*Antilocapra americana sonoriensis*) are examples of initiatives that have benefited from this agreement. The Commission for Environmental Cooperation, a trinational organization established in association with the North American Free Trade Agreement, has been particularly helpful in identifying hotspots for recovery and coordinating governments, nongovernment organizations, academia, and other interested parties for concentrated conservation efforts, especially in grasslands and marine protected areas. The Canada/United States Framework for Cooperation on the Protection and Recovery of Wild Species at Risk is an agreement between Environment Canada and the U.S. Department of the Interior that has helped facilitate binational conservation efforts for the piping plover (*Charadrius melodus*), wood bison (*Bison bison athabascae*[1]), and sea otter (*Enhydra lutris*), among other species, and has facilitated information exchange regarding new policies on listing and recovery. Conservationists working across the borders in North America, particularly those encountering barriers, should be aware of these pathways to assistance.

Recovery teams and recovery plans are the standard ways that Canada and the United States tackle recovery of listed species. In the case of shared species at risk, binational recovery efforts should be considered; however, in some cases, this may be unnecessary. Deciding whether to tackle binational recovery and which method to use should be based on such factors as the species' range, recovery goals of both countries, and interest by the public.

Key Words: binational, cross-border, Trilateral, Framework, Commission for Environmental Cooperation, CEC, species recovery, recovery plans, Memorandum of Understanding, MOUs, Canada, United States, Mexico

[1]NatureServe Explorer (version 4.0, July 2004) currently lists this species as *Bos bison athabascae.*

Introduction

Working across the international borders in North America to recover a species at risk can be a daunting experience. While the flora and fauna know no restrictions, biologists must follow political and cultural protocols. How do you know where to start? To what degree should you work binationally or trinationally? Some pathways that are available to assist conservationists will be described here, as well as suggestions for planning cross-border recovery efforts.

Canada, the United States, and Mexico all have federal legislation to protect species at risk. Canada has the *Species at Risk Act*, which lists 233 species[2]. The United States has the *Endangered Species Act*, through which the U.S. Fish and Wildlife Service and National Oceanic and Atmospheric Administration list 1287 domestic and 563 foreign species. Mexico's *Norma Oficial* lists 2583 species as of 2001. Many of these species are shared between two or more of these countries. This paper concentrates on species that are shared between Canada and the United States.

Twenty-seven species are listed in both the United States and Canada, including eight mammal species, seven bird species, two reptile species, one amphibian species, two fish species, one mollusc species, and six flowering plant species. The United States lists 18 species that occur in Canada but which Canada does not list. In comparison, Canada lists 148 species that occur in the United States but are unlisted there. Canada's higher number may be an artifact of a variation in the listing process between the two countries, or may be because many of these species are at the edge of their range in Canada and thus are more vulnerable.

Throughout the 20th century, Canada, the United States, and Mexico have signed treaties and agreements to facilitate conservation of shared species. Three cross-border agreements that Canada and the United States implement for species at risk are described here. Some overlap exists, since the agreements are all conservation-oriented. Conservationists who work with shared species should keep these agreements in mind as pathways to assistance in working with the other nations. Table 1 compares the three agreements and their most helpful aspects.

[2]The Committee on the Status of Endangered Wildlife in Canada (COSEWIC), an independent scientific advisory body responsible for the assessment of the status of wildlife considered to be at risk, has identified 429 extant species as either Extirpated, Endangered, Threatened, or of Special Concern.

Table 1. Summary of the three cross-border agreements and their most helpful aspects.

Trilateral	*Framework*	*CEC*
Type: Trinational (Canada/U.S./Mexico) Memorandum of Understanding among agencies for wildlife and ecosystem conservation	Type: Binational (Canada/U.S.) species at risk agreement between agencies	Type: Trinational (Canada/U.S./Mexico) formal environmental agreement among governments
Coordinating new species at risk fieldwork, especially by Canada/U.S. in Mexico	Exchanging species and policy information	Identifying environmental hotspots and issues
Solving cross-border coordination problems	Coordinating joint recovery	Bridging cultural and language barriers
	Endorsing cross-border work	Working with public and building capacity for communities
		Funding some projects

Trilateral

The Canada/Mexico/United States Trilateral Committee for Wildlife and Ecosystem Conservation and Management is a Memorandum of Understanding (MOU) that was signed in 1996 by the Director General of the Canadian Wildlife Service, the Director of the U.S. Fish and Wildlife Service, and the Director General of the Mexican Ministry of Environment and Natural Resources. This agreement merged several older conservation agreements together, although some widely known and powerful ones, such as the Migratory Bird Treaty Act, remain separate. The committee consists of biologists, managers, and officials from wildlife agencies of Canada, Mexico, and the United States, as well as state and provincial agencies, and nongovernment organizations. Mexico uses the latter more frequently than the other countries, because of the extent to which it depends on those organizations.

The committee meets formally once a year, alternating locations in the three countries. The purpose of the Trilateral is "to develop, implement, review and coordinate specific cooperative conservation projects…". The meetings are the best mechanism to bring cross-border work to the attention of the heads of the main federal wildlife agencies so they can better coordinate projects in their countries. As a general rule, anyone from the signatory agencies who is planning new on-the-ground work across one or both of the borders should bring this to the attention of the Trilateral through their Trilateral representative, particularly for fieldwork to be conducted in Mexico by representatives of Canadian or U.S. agencies. Work strictly occurring between Canada and the United States should not go through the Trilateral because the two countries have other mechanisms for coordinating collaborative efforts. Obtaining the support of the Trilateral for

work in Mexico may facilitate approval of any import and export permits that may be required. Conservationists who experience difficulty communicating across the border, obtaining a contact, or achieving resolution of an issue, can seek the assistance of the Trilateral.

The California condor (*Gymnogyps californianus*) provides an example of how the Trilateral assisted with a recovery project for Mexico and the United States. Mexico wanted to return condors, which had been extirpated from the country, to Baja California. They requested help from the United States, which had a captive-breeding program. The United States agreed, knowing that the reintroduction program helped recovery of the species in several ways. Having a separate population was a safeguard in case of a catastrophe in the United States. Also, in the United States, the goal of recovery is to restore a species throughout a significant portion of its range. The project involved many partners in both countries. The permits for export to Mexico and import from the United States were obtained with the support of the Trilateral.

The burrowing owl (*Athene cunicularia*) provides an example of how the Trilateral has been helping Canada. Canada has been losing its population of endangered burrowing owls at the rate of approximately 22% per year. Telemetry shows that the owls migrate south as far as Mexico, but not all return. The Canadian Wildlife Service wanted to know if the sink was in the United States or Mexico, but needed help from both countries to determine this, so turned to the Trilateral to coordinate biologists and managers and obtain contacts across the border.

Framework

The Framework for Cooperation between the U.S. Department of the Interior and Environment Canada in the Protection and Recovery of Wild Species at Risk was signed in 1997 by the Canadian Minister of the Environment and the U.S. Secretary of the Interior. The agreement commits the two governments to working together in the conservation of shared species at risk through agency coordination and bilateral communication. No formal vetting through this agreement is required for biologists to work between Canada and the United States. The two countries meet as needed to discuss mutual issues.

Canada and the United States have cooperated on the recovery of such species as the Karner blue butterfly (*Lycaeides melissa samuelis*[3]), northern swift fox (*Vulpes velox hebes*), Lake Erie water snake (*Nerodia sipedon insularum*), western prairie fringed orchid (*Plantathera praeclara*), marbled murrelet (*Brachyramphus marmoratus*), woodland caribou (*Rangifer tarandus caribou*), grizzly bear (*Ursus arctos horribilis*), black-footed ferret (*Mustela nigripes*), and piping plover (*Charadrius melodus*). The Framework has assisted collaborative work on sea otters (*Enhydra lutris*) and wood bison (*Bison bison athabascae*) and facilitated information exchange regarding new policies on listing and recovery, among other things.

[3]NatureServe Explorer (version 4.0, July 2004) currently lists this species as the Karner blue (*Plebejus melissa samuelis*).

CEC

The North American Commission for Environmental Cooperation (CEC) was formed in 1993 to implement the North American Agreement for Environmental Cooperation, a sister accord with the North American Free Trade Agreement. Its mission is to "facilitate cooperation and public participation to foster conservation, protection and enhancement of the North American environment for the benefit of present and future generations, in the context of increasing economic, trade and social links among Canada, Mexico and the United States." The commission is staffed by nongovernment employees who are paid by the governments of Canada, Mexico, and the United States. The CEC works with governmental agencies and the public. A major goal of the CEC is to work with communities and provide assistance with capacity building. This may be in the form of training, providing equipment, or providing 'seed' money to start projects such as sustainable harvesting or ecotourism. Unlike the previous two agreements described above, the CEC has potential to fund some projects. Canadian, U.S., and Mexican representatives are working with the CEC on migratory/transboundary species, including marine species. The CEC is particularly useful in identifying hotspots for recovery and coordinating governments, nongovernment organizations, academics, and other interested parties for concentrated conservation efforts.

In 2000, the three countries convened at the invitation of the CEC and produced (through the CEC) the report *Species of Common Conservation Concern in North America*, which describes what species could most benefit from trinational cooperation. The countries agreed upon 16 species: the ferruginous hawk (*Buteo regalis*), peregrine falcon (*Falco peregrinus*), loggerhead shrike (*Lanius ludovicianus*), piping plover, mountain plover (*Charadrius montanus*), burrowing owl, northern spotted owl (*Strix occidentalis caurina*), Mexican spotted owl (*S. o. lucida*), golden-cheeked warbler (*Dendroica chrysoparia*), whooping crane (*Grus americana*), California condor, black-tailed prairie dog (*Cynomys ludovicianus*), Sonoran pronghorn (*Antilocapra americana sonoriensis*), lesser long-nosed bat (*Leptonycteris curasoae yerbabuenae*), Mexican long-nosed bat (*L. nivalis*), American black bear (*Ursus americanus*), and gray wolf (*Canis lupus*). Subsequently, the countries realized that most of the species are, in some way, dependent on grasslands, and so began a trinational grassland conservation initiative—one of the hotspots that the CEC is assisting with. The grasslands of North America are the only ecosystem that extends unbroken from Canada to Mexico and offers a prime opportunity to share expertise and information on conservation efforts across the borders.

Planning Cross-border Recovery

Recovery teams and recovery plans are the standard ways that Canada and the United States tackle recovery of listed species. In the case of shared species at risk, binational recovery should always be considered; however, in some cases, this may be determined to be unnecessary. How do you decide to undertake binational recovery, and how do you decide which method to use?

There are several options, perhaps more if a little creativity is used; nothing is set in stone. Deciding multinational recovery efforts should be done on a case-by-case basis. I know of no trilateral recovery plans or teams, so this paper focuses on binational recovery planning. Since even binational efforts can be complicated, trinational ones would be more so. If a trinational effort is needed for successful recovery, it should be tackled with the assistance of someone experienced in working with a binational effort.

Several options for cross-border species recovery include establishing a binational recovery team, a binational recovery plan, a binational MOU, or a combination of these. Generally, a binational recovery team is easier to arrange than a plan, which requires more coordination between the countries in obtaining approval signatures. A binational recovery team is represented by both sides, preferably equally, and there is only one team per species. A recovery plan is written with input from both countries and outlines the recovery criteria in both countries. An MOU outlines the responsibilities of each party—who does what and when do they do it?

How do you know if you should create a binational team or write a binational plan or a binational MOU? Here are some questions to consider:

- Do both countries have a need for recovery? If both countries list the species, it is likely that binational recovery efforts would benefit both countries significantly. If recovery would not benefit the other country, try to find another way to get their assistance by finding out if you can help them with another species.
- Is the species' range contiguous or disjunct? If it is contiguous, binational recovery should be considered. If it is disjunct, it may not be expedient to expend effort across the border (the countries may be better off establishing their own efforts).
- Is recovery in one country dependent on recovery in the other? A good example is the whooping crane, which breeds in northern Canada and winters in the southern United States. The only way recovery can succeed is with the cooperation of both countries.
- What is the visibility of the species and the level of public interest? A species that is of no obvious interest to the public may not suffer from unilateral recovery efforts, but a species in the public's eye may require careful attention to all aspects of its existence.
- Will having a binational plan impede progress, either with getting the plan approved by both countries or with implementing it? A recovery plan should improve coordination among agencies, but occasionally it does the converse. It may not be obvious until the plan is being implemented, but it might necessitate a subsequent revision to change strategies.
- Can you accomplish what you need more simply with a binational MOU? The Mexican wolf recovery team decided to revise their binational plan and make it a U.S. plan, adding a binational MOU instead to ensure that the actions would be taken. The plan did not work well, primarily because it addressed one country more than the other. An MOU for specific responsibilities could accommodate both countries' policy differences.

- Can you accomplish what you need just by asking the other country for assistance? Even that step may not be warranted if your need is simple and short-term, and just working locally will suffice.

A true binational recovery team is where there is only one team per species for both countries, such as for the whooping crane. Although recovery efforts for the whooping crane were started in the 1960s, well before the Framework was signed, it serves as a model of a true binational recovery team. The team is also working on a binational recovery plan.

The alternative is a partial binational recovery team, where a country can have its own team with representation by the other country. A species can have two teams then, both with the other country participating. Whether it is a true or partial binational team, it should include a representative from both governments from the agencies with authority over that species, as well as a biologist from the other country. This should facilitate getting approval for recovery actions.

Conclusions

Assistance for species recovery is available under several international agreements, all of which promote cross-border cooperation. Recovery coordinators should determine if their species crosses a border before deciding what type of cross-border coordination they need. If they need to work with Mexico, they should discuss this with their Trilateral coordinator. Work between Canada and the United States is encouraged under the Canada/U.S. Framework and does not need formal vetting, although coordination with the jurisdictional agency is recommended. Issues regarding working with communities for species conservation may be brought to the attention of the CEC. Deciding which course of action to take for cross-border recovery planning should be done on a case-by-case basis. For more information, please see http://endangered.fws.gov and http://www.speciesatrisk.gc.ca.

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