Prairie Conservation Action Plan - Progress and Conservation Lessons Learned After Two Decades

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Abstract – Two decades after the release of the original Prairie Conservation Action Plan (PCAP), what progress have we made toward conserving prairie grasslands and endangered species while maintaining economic stability and productivity of these grasslands in Canada? Soon after the World Conservation Strategy was released, we produced our own conservation plan with the motto "Think Globally, Act Locally". The stated purpose of the plan was "to influence policy and attitudes so as to conserve the biological diversity found in the Canadian prairies". I will reflect on the nine conferences and the progress that we have made, or have not made, on the conservation of native prairie and endangered species. During this time we have down-listed Peregrine Falcons, reintroduced Black-footed Ferrets and de-listed Baird's Sparrow. But we have listed far more species that we have recovered. We have produced numerous recovery strategies, various plans, seen thousands of gas and oil wells drilled, installed many kilometers of pipelines and watched as thousands of acres of native prairie have been cultivated. Have we accomplished our goals? PCAP stated that we needed a commitment by westerners, cooperative action, and ongoing monitoring of progress. We need a reality check on our state of prairie conservation, our economy, agricultural policy and, most recently, even our climate.

With the passage of a quarter century of workshops and conferences dedicated to endangered species and prairie conservation, we ask: what have we accomplished and where do we go from here? These were the questions posed to me to address at this 9th Prairie Conservation and Endangered Species Conference. Obviously, prairie conservation is more than 25 years old. Our predecessors accomplished much before the first conference was held in 1986. They laid the groundwork for what we have accomplished since then. The Prairie Conservation Action Plan (PCAP) was published in 1988 just before the second conference (WWFC 1988). Not every conservation action that has occurred in the past 25 years can claim to be the result of these conferences and the Plan. But conferences have continued uninterrupted since 1986, a linkage of gatherings with published proceedings every three years that gives us a record of our progress.

This article is an overview of the progress in prairie conservation over the past 24 years. First I will document some of the history surrounding the origin of this series of conferences.

The Origin of the Prairie Conservation and Endangered Species Conferences

In today's environment of planning and strategy development, often top-down, hierarchical programming, the Prairie Conservation and Endangered Species Conference stands out as a grassroots example of a successful string of events that has no structured organization behind it, no master plan, but does have a 24-year record of nine successful gatherings.

When the first workshop was held in 1986 (the first seven were called 'workshops' rather than 'conferences'), Canada did not have any recovery teams nor a federal endangered species act. COSEWIC had existed for less than 10 years. Recovery efforts for listed species were initiated over the phone and by 'snail mail' with no direct team coordination or communication. The working sessions at the first workshop were defacto recovery team meetings, the first for many species. By the second workshop in 1989, some species experts remained in Regina and held team meetings in anticipation of the formal designation of recovery teams by the federalprovincial-territorial wildlife directors.

This series of conferences did not evolve from any organizational or planning effort but from fortuitous circumstances. In 1985, I had just been made a first level manager (head of Threatened Species section) in the Canadian Wildlife Service (CWS), Environment Canada, and was also President-Elect of the Edmonton Natural History Club (ENHC). Pat Clayton, president of the Federation of Alberta Naturalists (FAN) called me to ask if the ENHC would host the annual meeting of FAN in January 1986. I agreed and she asked that I organize an evening speaker or topic. As I learned more about threatened species conservation from CWS staff, I realized that many species had never been the subject of a workshop or expert gathering. As I called provincial and university experts on threatened species, it became apparent that a threatened species workshop was needed. Soon I had a Friday evening speaker to open the workshop, concurrent sessions for Saturday and a half day on Sunday. At this point, Garry Trottier, also of CWS, suggested that we should discuss habitat as well as species issues. So he organized a full day on Friday focused on prairie habitats. The first Prairie Conservation and Endangered Species workshop/conference was born.

As the program evolved, the requirements for space increased. Phil Stepney, then Director of the Provincial Museum of Alberta (now Royal Alberta Museum) immediately agreed to host the workshop. As the number of concurrent sessions increased, so did the number of additional rooms. Phil and I toured the museum and found laboratories that could be emptied for all the sessions. Dave Ealey, the current president of FAN, became chair of the local organizing committee. ENHC organized volunteers to handle registrations, Audio-Visual and the myriad of other tasks, while I helped and organized the program.

By the end of the weekend, the success of the meeting could be felt in the concluding session and the animated faces in the audience. Steve Herrero, as the rapporteur, gave the gathering a 'thumbs up', and Monte Hummel, President of World Wildlife Fund Canada (WWFC), raved about the workshop. Steve suggested that the workshop should be repeated. As I stood up to close the meeting, I realized that I had the opportunity to call a next meeting but had not discussed the options with anyone. I looked into the audience and recognized two smiling faces, decided three years was long enough to wait, and announced that the next meeting would be in Regina in 1989, organized by Dale Hjertaas and Lorne Scott – and so it was. The series of conferences was born.

The origin of the first Prairie Conservation Action Plan (PCAP)

When I called Monte Hummel in late 1985 to ask him to give a plenary talk at the first workshop, he readily agreed. WWFC was about to launch a series of regional conservation initiatives with the first planned elsewhere, but by the end of our phone call he proposed that the first conservation initiative of WWFC be based in the prairies. At the 1986 event, he announced the start of a three-year program called Wild West, and we released a joint promotional poster featuring a Swift Fox with the caption "Lets Keep Some Wild in the West". The conservation of biological diversity found on the Canadian prairies was the primary objective of the Wild West program.

The Wild West program funded over 90 demonstration projects for the recovery of endangered species, involved over 500 landowners in cooperative projects, and increased public awareness of what can be done to conserve prairie wildlife and habitats.

A major product of that initiative was the publication of the first *Prairie Conservation Action Plan: Lets Leave Some Wild in the West*, which was released to the public at the 1989 Workshop in Regina (WWFC 1988). This plan (PCAP) was the result of three years of work by a committee of Wild West that I chaired and Dave Leman coordinated while he was a graduate student at the University of Calgary (co-supervised by Steve Herrero and myself). The committee had representatives from all three provincial wildlife agencies and the federal Canadian Wildlife Service. The document was reviewed by a wide variety of stakeholder groups, landowners, universities, and government agencies (PCAP 1988, Leman 1990). The reason these details are mentioned is to show that this plan was not developed in isolation, but as a multi-disciplinary effort. PCAP was released with much fanfare in each provincial capital by Monte Hummel, together with either the provincial premier or the wildlife/environment minister.

Each province established a committee to enact PCAP. It had a five-year planning horizon, and all three prairie provinces have produced subsequent five-year plans. In addition, from 1989-1992, the Alberta wildlife minister Don Sparrow and Monte Hummel initiated a three-year follow-up to Wild West called "Prairie for Tomorrow". This provincial program funded many conservation and educational activities.

So what progress have we made on the original PCAP? The plan was developed after the publication of the World Conservation Strategy (WCS) (IUCN 1980). The WCS has three simple global objectives:

1. Maintain essential ecological processes and life-support systems,

2. Preserve biological diversity,

3. Ensure sustainable use of species and ecosystems.

Conservation of the Canadian prairies was consistent with these objectives. With the saying "Think globally, act locally", PCAP was drafted and published with great hopes. It had 10 goals:

1. Identify the remaining native prairie and parkland

2. Protect at least one large, representative area in each of the four major prairie ecoregions.

3. Establish across the three prairie provinces a system of protected native prairie ecosystems, and, where possible, connecting corridors. This system should include representative samples of each habitat sub-region.

4. Protect threatened ecosystems and habitats by preparing and implementing habitat management and restoration plans.

5. Protect and enhance the populations of prairie species designated nationally or provincially as vulnerable, threatened, endangered or extirpated, by implementing recovery and management plans.

6. Ensure that no additional species become threatened, endangered or extirpated.

7. Encourage governments to incorporate conservation of native prairie more explicitly into their programs.

8. Encourage balanced use of private lands that allows sustained use of the land while maintaining and enhancing the native biological diversity of the prairies.

9. Promote public awareness of the values and importance of prairie wildlife and wild places.

10. Promote research relevant to prairie conservation.

Each goal then has actions detailed in PCAP which are reviewed next.

Goal 1 describes actions to complete and make available inventories of native prairie and parkland. Such inventories now exist and are available from a variety of sources. These inventories confirm what was determined in PCAP – less than 20% of prairie Canada is still native and less than 1% of the tall grass prairie remains.

Goal 2 identifies 12 actions for the establishment of large reserves in all three provinces. Only two of these have been realized: the establishment of Grasslands National Park on September 23, 1989 (Fargey 2000) and the Suffield National Wildlife Area declared by Order In Council on June 19, 2003. The Suffield area was established as a National Park in 1922 to provide wintering habitat for diminishing prairie antelope populations. Subsequent to the recovery of the species, in 1938, the area was withdrawn as a park. The new NWA is much smaller than the original national park (Department of National Defense 2003) but its establishment provides a sound basis for continued protection. Grasslands National Park continues to gain landholdings on a willing seller / willing buyer basis.

Goal 3 was supported in 1984 when Saskatchewan established the Wildlife Habitat Protection Act, progressive legislation that protects 3.4 million acres of wetlands and uplands in the agricultural region. However, a planned sale of 1.6 million acres of Crown land puts some of

this wildlife habitat at risk in 2009, according to Nature Saskatchewan (Scott 2009). Otherwise, goal 3 seems to have been lost. Of nine actions recommended in PCAP, little progress is obvious. With no implementation strategy to gather support and resources, the establishment of a system of connected representative samples of each habitat sub-region is not going to happen.

Goal 4 recommends planning to protect habitats, but with limited funds and with proposals to sell off public lands, planning is headed in the opposite direction to prairie conservation. The construction of gas wells, pipelines and service roads in PRFA pastures and in native prairie in all three provinces is contrary to the goals of PCAP.

Goal 5 focuses on implementing plans to save species-at-risk. Previous federal and provincial legislation does include protection of most species under each jurisdiction. The federal Species At Risk Act (SARA) was proclaimed in 2004. The act has provisions for protection of residences and critical habitat of all listed endangered and threatened species. However, even though the act is 6 years old at the time of this conference, progress to complete all the recovery strategies, action plans, management plans, and identification of critical habitat that is dictated by the act has been slow (Anonymous 2009). This report states that the Banff Springs Snail is the only species in Canada which has all of the provisions of the act implemented. Currently a great deal of effort is going into drafting these documents but, with limited staff, the progress is indeed at a snail's pace and implementation has been limited.

Goal 6 states that we should ensure that no additional species become at risk. This goal has seen some spectacular successes in the area of reintroductions of extirpated species. In October 2009, Black-footed Ferrets were released into colonies of Black-tailed Prairie Dogs in Grasslands National Park and two adjacent private ranches. In 1986, this release was just a dream (Laing 1988) and the initial recovery team was not able to advance the reintroduction program.

Swift Fox populations have increased and the species has been removed from the extirpated list of COSEWIC. Twenty years ago, only two experimental releases of foxes had occurred, spearheaded by the captive breeding efforts of the late Miles and Beryl Smeeton (Reynolds 1987). The latest survey of Swift Fox in 2005 produced an estimate of 647 foxes in Alberta and Saskatchewan and 515 in northern Montana due to their expansion south (Moehrenschlager and Moehrenschlager 2006).

Plains Bison were released into the west block of Grasslands National Park in May 2006 after a major fencing program was completed under the leadership of park biologist Pat Fargey. This herd is successfully reproducing and growing (W. Olson, pers. commun.)

Peregrine Falcons have increased in the past 20 years. The breeding facility at Wainwright, Alberta was closed in 1996 after a 25-year captive breeding and release program. The species is now set to be downlisted to Special Concern (COSEWIC 2007)

Other species such as American White Pelican have gone from Threatened (Brechtel 1987) to an abundant species, another success story. However, most worrisome is the long and growing list of declining prairie mammals, birds, reptiles, amphibians, invertebrates and plants that are now listed by COSEWIC, and the many that are up for review for listing. In 1988 PCAP listed 18 vertebrates and 3 plants species that were listed by COSEWIC; in 2009, COSEWIC listed 35 species of vertebrates and 24 of plants (Table 1). New additions to the list include Common Nighthawk and Chestnut-collared Longspur, species that were common until recently. Also, we are no longer only listing species that are at the northern edge of their range, but are now listing many species that have extensive ranges in Canada but whose populations are in decline.

	Mammals		Birds		Herptiles		Invertebrates		Vascular Plants	
	1988	2009	1988	2009	1988	2009	1988	2009	1988	2009
Extirpated	2	2	0	1	0	0	0	0	0	0
Endangered	0	2	6	7	0	2	0	9	1	5
Threatened	2	3	3	8	0	1	0	0	0	9
Rare/Special	2	1	3	6	0	2	0	4	2	10
Concern										
total	6	8	12	22	0	5	0	13	3	24

Table 1. The number of species that occur in the three prairie provinces and were listed by COSEWIC in 2009 is far greater than were listed in 1988 for all taxa.

Goal 7 is more elusive to evaluate. Governments have many detailed programs, and determining if they explicitly incorporate conservation of native prairie is difficult.. The Ecological Goods and Services (EG&S) initiatives of government agricultural departments fit into this PCAP goal. On its website, Agriculture and Agri-Food Canada states that it "recognizes the contributions of farmers and rural landowners in protecting and enhancing the environment" (AAFC 2007). It describes two programs that incorporate the concept of EG&S: the National

Environmental Farm Planning Initiative and the National Farm Stewardship Program. The development of beneficial management practices (BMPs) by agriculture and wildlife agencies is another step in the right direction, but their benefits will only be realized when they are implemented. BMPs are important to the sustainability of the agriculture and agri-food industry and the long-term health of the environment including prairie wildlife and their habitats in Canada. AAFC is working with provincial governments to develop a framework for policies that are good for agriculture and that provide environmental benefits for all Canadians.

Alterntive Land Use Services (ALUS) is a producer-driven initiative that has been adopted in all three prairie provinces as well as elsewhere (MacArthur 2010). In Manitoba, the program pays \$25 per acre per year to landowners who maintain or reclaim land which provides environmental and societal benefits, including reduced soil erosion and stream siltation, improved water quality, and wildlife habitat protection. While not a lot of money, it pays the equivalent of taxes on land that otherwise is a liability for the landowner (Winters 2007). This program was initiated by producers and is supported by provincial and federal government, at least in its trial phases. The program appears to fully support the goals of PCAP.

Goal 8 presents actions to encourage private landowners to conserve native prairie. Nongovernment conservation organizations have implemented actions to support landowners' decisions to maintain native wildlife and habitats. Programs such as Operation Burrowing Owl and Shrubs for Shrikes of Nature Saskatchewan, Operation Grassland Community of the Alberta Fish and Game Association, the MULTISAR program of Alberta Sustainable Resource Development and several programs of Ducks Unlimited Canada have extension activities to help landowners develop environmental farm plans that incorporate the needs of species at risk and other wildlife while improving or at least maintaining the profitability of the land.

However, as the number of cattle producers declines in Canada, ranchers claim that they are an endangered species. On February 16, 2010, Statistics Canada reported that the number of cattle farms fell below 100,000 in Canada, the lowest number since 1931 (Martello et al. 2010). While the decline is not directly a prairie conservation issue, the poor economic condition of cattle ranches is a concern, especially as this is reflected in the number of family farms. For example, the net farm income for beef cattle farm operators declined 19.9% from 2005 to 2006, the latest year for which statistics are available (Chartrand and Beaulieu 2009). Grazing of native

prairie by cattle is a conservation benefit. If ranchers are forced to do something else with the prairie, then we would have a conservation concern. Around Calgary and other cities, native prairie is being bought and developed into residential properties. As acreage residences are created, much native land is lost to asphalt and Kentucky Blue Grass. Alternatively, conservation lands away from urban centers can be purchased at rock-bottom prices if funds are available to groups such as Nature Conservancy Canada.

Farm Credit Canada (2010) reported that 60% of producers and agri-business operators were considering the environment in their business practices, an encouraging percentage (Ewins 2010). One catchy phrase in that report was that a triple bottom line approach of "people, profit and planet" will benefit all three. Part of this greening trend is minimizing the environmental impact of agricultural operations, which will ultimately benefit prairie conservation.

Goal 9 is targeted at increasing public awareness. Progress on this goal is difficult to evaluate. Funding for educational interpretive programs varies by institutions, government jurisdiction, etc.. One recent positive example occurred in Edmonton with the announcement of new funding for expansion of the John Janzen Nature Center; on the other hand, there is the perpetually postponed expansion or relocation of the Royal Alberta Museum. Non-government environmental organizations have some positive examples such as the, Owls and Cows program of Saskatchewan Burrowing Owl Interpretive Center (SBOIC) and Saskatchewan's Prairie Conservation Action Plan Committee which has a goal of exposing every school child in southern Saskatchewan to the program at least once during elementary school, and the success of the SBOIC in Moose Jaw, including their Owls on Tour program (Felskie 2001). Another positive development is the commitment to extension programming by Parks Canada Agency (PCA). They are encouraging staff to develop community and school programs to make the Canadian public more aware of their natural heritage protected in our national parks. In Val Marie, the Prairie Learning Center holds educational events using Grasslands National Park as its resource and back drop. But in cities, celebrations of Wildlife Week and Environment Week are on the wane and an increasingly urban populace with electronic addictions increases the challenge of providing a connection to landscape and endangered species.

Even in the rural landscape, the observations of Gilbert Proulx near Mankota, Saskatchewan (Proulx 2011) tell a disturbing story of environmental abuse and lack of

understanding of basic biology. Landowners, presumably driven by the goal of protecting their crops from foraging Richardson's Ground Squirrels, are misapplying strychnine and rodenticide bait stations. As a result, they are poisoning predators and non-target species that would otherwise help in the control of pest species or are innocent 'bystanders'. More education about a balanced approach to pest management is needed to prevent such occurrences.

Goal 10 is to promote research on prairie conservation. Many research projects have been conducted in the past 25 years which cannot all be reviewed here. Our research with the CWS has led to the discovery of wintering grounds of Burrowing Owls, their winter ecology, winter survival and, most recently, migration routes (Holroyd et al. 2010). Together with Jason Duxbury, we presented the hypothesis that some Burrowing Owls disperse long distances from one year to the next. An example of this dispersal is the reappearance of Burrowing Owls in southwestern Manitoba after an absence of many years. Clearly these owls are not a local population but immigrated from 'somewhere else'. Other examples of single-species research abound. But as a researcher, I also have to ask myself: "are there more owls as the result of my studies?" Most of my studies have been targeted at learning more about the species' basic biology. More research should be targeted at specific conservation applications if we are to truly help the species at risk that we study.

To achieve this, we would have to complete the implementation of the specific actions from PCAP. Currently, there is no prairie-wide committee to identify research priorities, there are no guidelines on research priorities, and there are no research stations designated for grassland research and long-term monitoring (as exists in the USA). Although there are a few exceptions, most research projects are independent, short term, and not interlinked in any ecosystem or food chain project. The example of the Boreal program in the Yukon demonstrated what could be accomplished by a team effort (Krebs et al. 2001). The sum of individual projects was far greater than each project's individual accomplishment.

Discussion

Overall we have implemented less than half of the actions recommended in PCAP; a school grade of < 50%. And remember – the goals of PCAP were for five years. This brief evaluation is after 20 years. Each province has had subsequent 5-year Action Plans, but we have not been able

to achieve these goals, albeit ambitious ones. Perhaps the original goals were too ambitious? Did we aim for the stars and land on the moon, rather than aim for the fence and hit the dirt?

Besides conservation of prairie wildlife and habitats, we face frequent daily reminders of many more warnings of our fate on this planet. Most notably in the past 25 years is the attention given to climate change, not even on the agenda of the early conferences. Many awesome new books have been written in the past quarter century that have given us sober reminders of the causes of the demise of past societies, such as Collapse (Diamond 2005). Several books have followed on the theme of Rachel Carson's *Silent Spring*, describing the decline in bird populations in North American such as *Restoring North America's Birds* (Askins 2000), *Silence of the Songbirds* (Stutchbury 2007), *Where Have All the Birds Gone?* (Terborgh 1989), and more locally and most recently *Grass, Sky, Song: Promise and Peril in the World of Grassland Birds* (Herriot 2009).

So why are we not making more progress? You and I are convinced more needs to be done. Why else would we travel in February to Winnipeg, or Regina or Saskatoon, Lethbridge, Brandon, Calgary or Edmonton for these conferences? We cannot be accused of fleeing to some exotic locale to discuss our conservation issues.

One suggestion is that we must take a longer term view and create a different set of goals. Although I hate to state this (you will see why later), we need another plan, but this time an implementation plan with funding. The first conference and action plan were two decades ago. I now have colleagues in our office that were very young when the action plan was published. If all of them, and all their peers, had grown up with a strong environmental ethic, society would be on the road to finding and implementing solutions to all environmental problems.

John Livingston (1981) stated this philosophy in *The Fallacy of Wildlife Conservation*, where he argues that all the logical arguments to conserve wildlife ultimately fail. Did we choose careers as wildlife biologists to become rich, or for religious reasons, or for any of the other logical reasons that we try to put forward to society to conserve wildlife? Livingston stated "In the broadest sense, wildlife preservation is a catastrophic, heart-breaking disaster"; pretty harsh words regardless of the time frame. His thesis is that all logical arguments to conserve wildlife ultimately fail to convince anyone but the already converted. And we are converted because of our own personal experiences with wildlife. Are you promoting wildlife conservation because of

some logical reason? Or are you active because you enjoy wildlife and believe intrinsically in the need for wildlife to exist and prosper?

If you ever visit Tucson, Arizona take a day, a full day, and explore the Sonoran Desert Museum. It is not a traditional institution of stuffed animals but rather a zoo of native plants and animals set in the native Sonoran desert. In his book *Pebbles in Your Shoes*, Carr (1982) describes the underlying philosophy of this unique facility. If you have a pebble in your shoe, you pay attention to it, stop and admire it as you remove it. Maybe not admire it, but at least it gets your attention. The 'museum' is designed to get the visitor to stop and look at all the native desert organisms. They do not house exotic animals; no elephants or giraffes here. Rather, they have a hummingbird house of native species, native cactus galore, desert mammals, both large and small, all showing the huge diversity of this part of the planet in an effort to get the visitor to stop and appreciate the variety of life around them. These pebbles can grow, just as if they were tossed into a pond, creating ripples that radiate outwards.

In *The Tipping Point*, Gladwell (2000) describes how little things can make a difference. He gives examples of events that have changed major directions of society, and such events can also occur at the local, even personal, level. For example, on the Edmonton Christmas Bird Count in 1989, we had a city-wide, public contest through our daily newspaper, The Edmonton Journal. First prize was a spring day of bird watching with me at Beaverhill Lake, with lunch provided by the Westin Hotel, cooked on site by their staff. (And no, second prize was not two days bird watching with me, as some colleagues suggested!) The weather on the chosen day was cold, wet and windy. The couple that won the prize were not bird watchers, but they came anyway. We saw lots of birds and had a delicious lunch, and at the end of the day, I thought that was that. But little did I know the 'tipping point' that was created for that couple on that day. The woman came up to me a few years later, reminded me who she was, and described how that day had changed their lives. They sold their condo in the city and bought an acreage which was now loaded with bird feeders. She quit her job, volunteered and then worked for a wildlife rehabilitation facility, and was one exam away from qualifying as a master rehabilitator. That day had changed their lives and she wanted to say thanks. A pebble in their shoe became a tipping point in their lives.

How many of us had such tipping points early in our lives? For me, it was the sight of a European Robin from a hospital window while recovering from surgery to remove tuberculosisinfected glands from my neck at the age of seven. Stutchbury (2007) describes how childhood observations of birds at her family cottage led to her career as a biologist and university professor. Other environmentalists have similar stories of childhood experiences. We should have more opportunities for children to experience nature, to find a pebble in their shoe and create a personal tipping point in their lives.

At the 1986 conference, Dr Walter Moser, a retired botany professor from the University of Alberta, told the story of his project to save an Austrian woods from ski development. Town council was to vote on a rezoning of the woods to allow the trees to be cut for a ski run. Rather than tackle the developer head-on, he took the local school children on trips to the woodlot. They wrote stories and poems about their experiences, and made drawings of what they saw. Dr. Moser then took those papers and published a book on the children's views of the woodlot and gave a copy to every school child. How could the town councilors vote to cut the forest when their own children were so attached to, and proud of, their book and the woodlot? They didn't, and the trees were saved.

Dr. Moser's presentation had an important conclusion. He described society and science as two wheels traveling though time. When two wheels going in the same direction touch, they grate against each other; the back of the lead wheel goes up while the front of the following wheel comes down. He argued that we need communicators, who function as a third wheel suspended between the two wheels. The three wheels then move in synchrony. The middle wheel represents communication between the scientist and the public, and provides the grease, or understanding, between the two sectors of our society, and all moves smoothly.

Have we lost our communicators? When I was a child, there were many live-in nature schools or camps, a place where students arrived on Monday and left on Friday after a week of immersion in nature. Do we still have those? Yes, but not many, especially when compared to the growing population of youngsters that grow up in cities with little or no connection to nature. We need children to grow up with binoculars as well as hockey sticks, and fewer violent computer games!

What else has slowed our progress in wildlife conservation, in my view? One issue is regulation and planning. When I was a teenager, a friend called and asked if I was available on the weekend; a shipment of Canada Geese was arriving in Toronto. A reintroduction of this extirpated species was to occur at Centre Island and they needed help to haul and open the cages! There was no fanfare, and I'm not sure what paperwork was needed but back then it would have been minimal, so we conducted one of the fastest and most successful reintroductions in Canada. Some would say that we over did it. Near Long Point, when local farmer Brown expressed concern that his few geese might be shot, we produced a "Do Not Shoot Canada Geese" pamphlet and distributed them to motels and restaurants where hunters would gather. Farmer Brown's geese prospered with no administrative paperwork.

Since the mid 1980s I have been lucky enough to be involved in the Peregrine Falcon recovery program (Holroyd 2003). A recovery plan was published halfway through the reintroduction effort (Erickson et al. 1988), not before reintroduction could begin. Now, 20 years later, we have never managed to finalize a second recovery plan as the format and content of plans has changed too frequently. Nevertheless, the recovery has been a success due to the effort of many committed agencies that pulled together without a published plan. The process to downlist peregrines began after the 2000 national peregrine survey but is still not complete after a decade of paperwork (COSEWIC 2007).

In October 2009, the Black-footed Ferret was released into Grasslands National Park and two adjacent private ranches. The recovery team met for five years to plan the releases. A huge paper exercise was needed to get permission from all levels of government and landowners before a small member of the weasel family could be returned to the Canadian prairies. This is a good news story, but not without its administrative paperwork delays and expenses.

As a final example, the Mountain Plover has been listed as endangered for over 20 years. Several recovery teams have met and are now disbanded; several recovery plans and strategies have been drafted and now gather dust. But I am not aware of one conservation action to benefit this species in Canada. We seem to be happy producing plans but not implementing them. The need to develop too many plans becomes an excuse for inaction. When plans are finally drafted, then they are not funded and implemented. By that time, another plan is needed.

Granted, we need to know where we are going. If funds are to be spent, then there should be a plan of what will be funded and how. But if funds are not available, why create plan after plan? If there is no intention to implement a plan, then why draft it? I was once an eager drafter of plans, but after thirty years of drafting such plans, I realize the futility of most.

One positive example of planning was the North American Waterfowl Management Plan (NAWMP) signed by Canada and the US in 1986 (NAWMP 1998). That plan was drafted by biologists and managers but was targeted at politicians and the treasuries of the US and Canada. And it was successful, and is still funded and implemented by a collaboration of landowners, government and non-government agencies, and universities.

But the majority of plans have not and will not be funded directly. The recovery teams that develop the plans and then implement them do not have direct funding to allocate to priority activities. Each partner in the team accomplishes actions that are a priority to their agency. In this way, some actions do get accomplished. The plans can be quoted when applying for funds, but the plans are not funded directly. Ideally each plan would have a process to obtain direct funding to implement all of the actions in the plan.

If there was a major failing of PCAP, it was the lack of a funding plan to get it implemented. WWFC provided seed funds for four implementation committees to meet: one in each of the three prairie provinces, and one prairie-wide committee. The three provincial committees were formed by the provincial representatives of the Wild West committee, but the prairie-wide committee never met due to a change both in personnel and in perceived mandates in CWS. But none of the committees had a plan to get direct funding to implement their portion of PCAP.

Conclusion

In conclusion, the Prairie Conservation Action Plan, the series of nine PCES conferences, and the three provincial implementation committees have been successful in bringing prairie conservation issues to the public forum and keeping them there. They have served as catalysts for action by many interested parties across the three provinces. There have been some spectacular results for individual species, especially the reintroduction of extirpated species. But as the list of COSEWIC species gets longer, and prairie continues to be lost and fragmented, much remains to

be done. The goals and actions of the original PCAP are still valid after 20 years and need to be pursued. A longer term view is needed to put more effort into education, especially environmental experiences for children, for they will inherit this world and will have to solve the problems that we leave behind. Finally, those relatively large tracts of prairie land that still exist in southern Alberta and Saskatchewan hold the last chance for prairie species, and every effort should be made to keep this land in its natural state. This will require commitment by all levels of government, and by us, to make sure the original intentions of PCAP continue to be realized.

We need champions for conservation to keep working towards the goals of PCAP. We may not have reached the stars but we have landed on the moon, and need to continue our efforts to ensure prairie wildlife continue to exist. Think Globally, Act Locally.

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