

North American Commission for Environmental Cooperation
Grassland Species of Common Conservation Concern
Nuevo Casas Grandes, Chihuahua, 21-23 III. 2001

List of ongoing projects/Lista de proyectos en marcha
(As of March 7)

CANADA

- A1. 6th Prairie Conservation & Endangered Species Conference. Dr. Rick Baydack, University of Manitoba
- A2. Prairie Grouse Conservation and Management. Dr. Rick Baydack, University of Manitoba
- A3. Biological Diversity Working Group of The Wildlife Society. Dr. Rick Baydack, University of Manitoba
- A4. Sustainable Farming Extension Program. Rihian Christie, University of Manitoba
- A5. Prairie Conservation Action Plan (Saskatchewan). Karen Scalese, Saskatchewan Stock Growers Association (SSGA)
- A6. CWS Lands Program (cooperation with Canadian Forces Base Suffield). Gary Trotter, Canadian Wildlife Service.
- A7. Conservation of Burrowing Owls in North America. Dr. Geoff Holroyd, Canadian Wildlife Service
- A8. Persistence of the yucca-yucca moth mutualism at the northern edge of range. Donna Hurlburt, University of Alberta
- A9. Multi-functionality on a prairie landscape. Bob Sopuck (associated with Delta Waterfowl Foundation and University of Brandon)
- A10. Canadian Landbird Monitoring Strategy & Grasslands birds Monitoring Project: Brenda Dale; Environment Canada
- A11. Ecology and management of crested wheatgrass invasion in northern mixed prairie. Darcy C. Henderson and Dr. M. Anne Naeth, University of Alberta
- A12. Wildlife Habitat Canada. Jean Cinq-Mars, Wildlife Habitat Canada
- A13. Grasslands National Park: prairie dog conservation initiatives, endangered species conservation, habitat acquisition, prairie restoration, post-grazing restoration. Pat Fargey, Parks Canada
- A14. Physiological and population ecology of the northernmost prairie dogs. David Gummer, Curator of Mammalogy Provincial Museum of Alberta
- A15. Species: in support of Burrowing Owls and other grassland birds. Dr. Dan L. Johnson, AAFC Research Centre
- A16. Alternate Land Use Services. Mr. Ian Wishart c/o Keystone Agricultural Producers

MEXICO

- B1. Influencia de los perros llaneros (*Cynomys ludovicianus*) en la diversidad biológica de la flora y fauna en los pastizales naturales de México. *Influence of prairie dogs in the biological diversity of natural prairies of Mexico* Dr. Gerardo Ceballos, Biol. Juan Cruzado, M. en C. Patricia Manzano, Dr. Rurik List, Biól. Jesús Pacheco, M. en C. Georgina Santos. Instituto de Ecología-UNAM.
- B2. Reintroducción del hurón de patas negras (*Mustela nigripes*) en el complejo Janos-Nuevo Casas Grandes, Chihuahua. *Reintroduction of the black footed ferret in the Janos'Nuevo Casas Grandes, Chihuahua, complex*. Dr. Gerardo Ceballos, Dr. Rurik List, Biol. Jesús Pacheco Instituto de Ecología-UNAM.
- B3. Electrocutación de rapaces en el complejo de perros llaneros Janos-Nuevo Casas Grandes, Chihuahua. *Electrocution of prey birds in the Janos-Nuevo Casas Grandes, Chihuahua, complex*. M. en C. Patricia Manzano, Rick Harness. Proyecto Alas, Unidos para la Conservación, CFE.
- B4. Análisis espacial del paisaje para la determinación de sitios potenciales para la reintroducción del lobo gris mexicano en Sonora, Chihuahua y Coahuila, México. *Spatial landscape analysis to determine potential reintroduction areas for the Mexican grey Wolf in Sonora, Chihuahua and Coahuila, Mexico*. M.V.Z. Marcela Araiza Ortiz (Guanajuato), Nahum Sánchez Morales (Nuevo León) y Rurik List, Naturalia, A.C., Instituto de Ecología-UNAM.
- B5. Estudio casi terminado sobre unas 25 especies de plantas raras, amenazadas o en peligro de extinción comunes a México y EEUU en el área fronteriza de Texas y Tamaulipas. *Almost complete study of some 25 species of rare, threatened and endangered plants common to Mexico and the USA in the border region of Texas and Tamaulipas*. Francisco González-Medrano. Instituto de Biología, UNAM

- B6. Estudio autoecológico de *Manihot walkerae* Croizat (Euphorbiaceae), especie de importancia agronómica a nivel mundial, en peligro de extinción en Texas y presente aun en México en donde se desarrolla en áreas de pastizal y selva baja caducifolia. / *Autoecological study of Manihot walkerae Croizat (Euphorbiaceae), a cultivar of global importance currently threatened in Texas and still occurring in Mexico's grasslands and low dry forest*. Francisco González-Medrano. Instituto de Biología, UNAM
- B7. Determinación del origen migratorio de murciélagos nectarívoros narigudos *Leptonycteris curasoae*, mediante el análisis isotópico. *Assessment of the migratory origin of long nosed nectar feeding bats through an isotopic analysis*. Dr. Luis Gerardo Herrera M.
- B8. Estudio de las poblaciones de berrendo sonoreño (*Antilocapra americana sonoriensis*), en la región de los Vidrios en la Reserva de la Biosfera El Pinacate y Gran Desierto de Altar, Sonora, México. / *Study of the Sonoran Pronghorn populations in the Vidrios region of the El Pinacate and Gran Desierto de Altar Biosphere Reserve, Sonora, Mexico*. Rafaela Paredes. IMADES
- B9. Evaluación de supervivencia de crías y control de depredadores en las áreas del Sueco-Moctezuma y el Valle Colombia en Chihuahua y Coahuila. / *Offspring survival assessment and predator control at Sueco-Moctezuma and el Valle Colombia regions (Chihuahua and Coahuila)*. Manuel Valdés Unidos para la Conservación A.C.
- B10. Conservación en las praderas de Janos, Chihuahua. / *Conservation in the Janos prairies, Chihuahua*. Mauricio Cotera, Naturalia, A.C.
- B11. Determinación de sitios potenciales para la reintroducción del lobo mexicano mediante un análisis espacial de paisaje en Sonora, Chihuahua y Coahuila, México. / *Determination for potential reintroduction sites of the Mexican Wolf through a spatial landscape analysis in Sonora, Chihuahua and Coahuila, Mexico* Marcela Areli Araiza Ortiz. Naturalia A.C. y Defenders of Wildlife.

USA

- C1. High Plains Partnership
- C2. Prairie Partners
- C3. Comanche Pool Prairie Resource Foundation
- C4. Conservation Strategy for the ferruginous hawk in the Great Plains Species: Ferruginous. Hawk John Sidle and Dan Svingen, USDA Forest Service
- C5. Black-tailed prairie dog. John Sidle, USDA Forest Service
- C6. Black-footed Ferret. Pete Gober, USFWS,
- C7. Whooping Crane. Tom Stehn, USFWS and Brian Johns CWS
- C8. Burrowing Owl. Stephanie Jones, USFWS
- C9. America's Wild Grasslands: Rediscovering and Restoring Forgotten Landscapes. Catherine Johnson, National Wildlife Federation
- C10. Population and community structure of grassland birds on wintering grounds in northern Mexico: influence of domestic and native herbivores. Martha Desmond, New Mexico State University
- C11. Burrowing Owl (*Athene cunicularia*) Nesting Strategies and Reproductive Success in Urban vs Native Habitats and Among Burrow Types. Martha Desmond, New Mexico State University
- C12. Grassland bird wintering ecology on the gulf coast of South Texas and northern Mexico. Martha Desmond, New Mexico State University
- C13. Migrant stopover ecology for birds in arid environments. Martha Desmond, New Mexico State University
- C14. Habitat selection by wintering sparrows in southern New Mexico: influence of habitat quality and seed availability. Martha Desmond, New Mexico State University
- C15. Grassland Bird Use of Agricultural Borders on Wintering Grounds in Northern Mexico. Martha Desmond, New Mexico State University.
- C16. Wintering Raptor and Prairie Dog Survey. Natasha B, Kotliar and Cynthia Melcher, USGS-BRD
- C17. Grassland passerine demographics in the mixed-grass prairie of Northeastern Montana. Stephanie L. Jones USFWS

CANADA

A1 Project: 6th Prairie Conservation & Endangered Species Conference

Species / ecosystem targeted:

Prairie ecozones of Canada and northern US

Location of project :

Winnipeg, MB.

Name and address of institution(s) and person(s) responsible for project:

Dr. Rick Baydack, Program Chairperson, University of Manitoba, Natural Resources Institute,
Winnipeg, MB. R3T 2N2
email: baydack@ms.umanitoba.ca *Fax:* 204-261-0038

Size of project (funding or other): Approximate budget \$85,000

Goal of project:

To bring together prairie managers, researchers, and landowners to allow for sharing of information on prairie conservation activities (held every 3rd year in a Canadian prairie province).

Results to date (including publications):

- See Conference website (<http://iisd.ca/wetlands/pcesc/>)
- anticipated attendance 350-400
- approximately 85 oral presentations to be provided over February 22-25 Conference
- approximately 40 poster presentations anticipated

Community participation and other partners :

- Conference Steering Committee represents 15 different organisations
- 12 major sponsors/patrons and 15 additional sponsors

Ongoing outreach and capacity building:

- public relations committee contacting prairie newspapers and listservers
- plans for future conference in AB in 2004
- conference proceedings to be available in summer 2001

Needs to improve project:

- coverage of additional US prairie states could be encouraged in association with The Wildlife Society Annual Conference in Bismarck, ND in September 2002, as Baydack is Chairperson of the Program Subcommittee on Symposia and Workshops

Actual or potential interest in bi- or tri- national cooperation:

- very strong interest among Conference Steering Committee to involve members of the Grasslands SCCC Committee in our Conference

A2. Project: Prairie Grouse Conservation and Management

Species / ecosystem targeted: Prairie ecozones of Canada and US

Location of project:

Centered in Winnipeg, MB., but research throughout prairie areas of North America

Name and address of institution(s) and person(s) responsible for project

Dr. Rick Baydack, Chairperson of Prairie Grouse Technical Council, University of Manitoba, Natural Resources Institute, Winnipeg, MB. R3T 2N2

email: baydack@ms.umanitoba.ca *Fax:* 204-261-0038

Size of project (funding or other):

Various, Technical Council Budget currently about \$10,000

Goal of project:

To bring together prairie grouse managers, researchers, and landowners to allow for sharing of information on prairie grouse management and conservation activities (held every 2nd year in a US prairie state or Canadian prairie province, next Conference in Woodward, OK in November 2002).

Results to date (including publications): Regular Conference Proceedings from 23 previous

Conferences, the most recent of which was held in Gimli, MB., September 1999

Community participation and other partners :

Technical Council members currently from 6 US states and 2 Canadian provinces

Ongoing outreach and capacity building:

Prairie Grouse Listserver

Needs to improve project:

Consider additional Workshops/conferences in addition to regular schedule

Actual or potential interest in bi- or tri- national cooperation:

- very strong interest among Technical Council members to become involved members with Grasslands SCCC Committee

A3. Project: Biological Diversity Working Group of The Wildlife Society

Species / ecosystem targeted: All ecosystems in North America

Location of project:

Chairperson currently centred in Winnipeg, MB., but management projects located throughout North America

Name and address of institution(s) and person(s) responsible for project:

Dr. Rick Baydack, Chairperson of Biological Working Group, University of Manitoba, Natural Resources Institute, Winnipeg, MB. R3T 2N2

email: baydack@ms.umanitoba.ca *Fax:* 204-261-0038

Size of project (funding or other): Various, Working Group Budget currently about \$5,000

Goal of project:

To encourage activities which advance the conservation of biological diversity from theoretical discussion to practical application in all areas of North America through regular meetings and Workshops (next meeting scheduled in Washington, DC, March 2001, followed by Reno, NV in September 2001)

Results to date (including publications):

Regular Newsletter, Conference Proceedings from 6 previous Conferences, the most recent of which was held in Nashville, TN., September 2000

Community participation and other partners

Working Group members from across North America, executive members currently from 8 US states and 1 Canadian province

Ongoing outreach and capacity building:

Newsletter

Needs to improve project:

Consider additional Workshops/conferences in addition to regular schedule

Actual or potential interest in bi- or tri- national cooperation:

- very strong interest among Executive to become further involved members with Grasslands SCCC Committee

A4. Project: Sustainable Farming Extension Program

Species / ecosystem targeted:

Grazing management, riparian habitats, cattle grazing.

Location of project:

Agricultural regions of Manitoba

Name and address of institution(s) and person(s) responsible for project:

Rihian Christie, Natural Resources Institute - University of Manitoba
Winnipeg, Manitoba, Canada, R3T 2N2

email: rchristi@mhhc.mb.ca *Tel:* (204)784-4350 *Fax:*(204)784-4359

Size of project (funding or other):

Funding: 85 000\$ over a few years.

Goal of project:

Encourage sustainable farming in agricultural regions of Manitoba. Provide sustainable agriculture information and guidelines.

Results to date (including publications):

Very preliminary

Community participation and other partners

Manitoba Habitat and Heritage Corporation (non-profit Government-owned corporation)
Manitoba Ministry of Conservation
Manitoba Ministry of Agriculture and Agrifoods
Ducks Unlimited
Critical Wildlife Habitat
University of Manitoba (Natural Resources Institute and Faculty of Agriculture)

Ongoing outreach and capacity building :

Development projected for 2002—2003

Needs to improve project:

Increase funding and increased involvement with producer side (stakeholder)

Actual or potential interest in bi- or tri- national cooperation:

Yes

Grassland grazing management
Accessibility on Web

A5. Project: Prairie Conservation Action Plan (Saskatchewan)

Species / ecosystem targeted:

Prairie Ecozone

Location of project:

Prairie Ecozone

Name and address of institution(s) and person(s) responsible for project:

Karen Scalse, Saskatchewan Stock Growers Association (SSGA)
Box 4752, Regina, S4P 3Y4

email: pcap@sk.sympatica.ca *Tel:* (306)352-0472 *Fax:*(306) 525-5852

Size of project (funding or other):

One paid employee + inkind support

Goals of project:

1. To sustain a healthy natural prairie grazing resource.
To conserve the remaining prairie resource.
To maintain Saskatchewan's natural prairie bio-diversity.
To promote the sustainable use of native prairieland to enhance the quality of life.
To promote education and sustainable use of significant progress since the launch of the native prairie plan in 1998.

Results to date (including publications):

Significant progress since launch of native prairie plan in 1998.

Community participation and other partners:

- 21 partners representing federal and provincial governments, agencies, academic institutions, NGOs and industry.
- 2 Universities
- 1 National conservation organization (WWF)
- 1 International professional society

Ongoing outreach and capacity building:

School programs / brochures / website / extension programs / technical workshops for landowners / fact sheets /

Needs to improve project:

- More money and staff.
- Broadening of the partnership base.

Actual or potential interest in bi- or tri- national cooperation:

- Past participation at such workshops
- Very interested

A6. Project: CWS Lands Program (cooperation with Canadian Forces Base Suffield)

Species / ecosystem targeted:

Mixed Prairie

Location of project:

Alberta, CFB Suffield

Name and address of institution(s) and person(s) responsible for project:

Gary Trottier, Canadian Wildlife Service. Room 200, 4999 98th Ave.
Edmonton, Alberta, T6B 2X3
email: gary.trottier@ec.gc.ca *Tel*(780)951-8680 *Fax* (780)495-2615

Size of project (funding or other):

250 000\$ over 3 years

Goal of project:

Designation of CFB (Army Base) Suffield National Wildlife Area (and subsequent cooperative management)

Results to date (including publications):

Identification reports on wildlife inventory, vegetation, wetlands, and snakes.
Paper ("Wildlife Bites the Bullet") presented at Wildlife Habitat Canada conference in Quebec City (1999)

Community participation and other partners:

Department of National Defence
Prairie Farm Rehabilitation Agency (Agriculture and Agri-Food Canada)
Various private Energy Sector partners

On going outreach and capacity building:

Needs to improve project:

Actual or potential interest in bi- or tri- national cooperation:

YES

Site specific

Management model / Sustainability / Integrating land use
Personnel with prairie wildlife inventory technique expertise available.

A7. Project: Conservation of Burrowing Owls in North America

Species / ecosystem targeted:

Burrowing Owls, other prairie wildlife / Grassland ecosystems

Location of project :

central and northern Mexico, southern Texas, Great Plains, southern Alberta and Saskatchewan

Name and address of institution(s) and person(s) responsible for project:

Dr. Geoff Holroyd, Canadian Wildlife Service, Room 200, 4999-98 Ave, Edmonton, AB, T6B 2X3, Canada
email: geoffrey.holroyd@ec.gc.ca *Fax:*951-495-2615

Size of project (funding or other):

Involves several university, government and conservation groups in all three countries

Goal of project:

To reverse the decline of burrowing owl populations in western North America.

Results to date (including publications) :

Large number of studies completed on breeding ecology, located concentrations of wintering owls.
Initiated winter ecology studies

Community participation and other partners:
Many in all three countries

Ongoing outreach and capacity building:

We have produced several documents for landowners in all three countries in English and Spanish.

Needs to improve project:

Limited by the lack of US and Mexico funding. Funds to date have come from Canada and this winter from National Fish and Wildlife Foundation.

Actual or potential interest in bi- or tri- national cooperation:

I am very interested in international cooperation and have spent the last decade building partnerships in all three countries.

A8. Project: Persistence of the yucca-yucca moth mutualism at the northern edge of range

Species / ecosystem targeted:

Soapweed (*Yucca glauca*) and yucca moth (*Tegeticula yuccasella*) in shortgrass prairie
The relationship between the soapweed (*Y. glauca*) and the yucca moth (*Tegeticula yuccasella*) is obligate for both partners; neither species can survive without the other. Moth larvae feed only on yucca seeds and in turn, yuccas can only reproduce sexually if they are pollinated by adult yucca moths.

Location of project:

Southern Alberta and Montana/Wyoming

Name and address of institution(s) and person(s) responsible for project:

Donna Hurlburt
CW405 Biological Sciences Building
University of Alberta
Edmonton, AB T6G 2E9
Phone: 780-492-2539
email: Hulbudd@telusplanet.net Fax: 780-492-3308

Size of project (funding or other):

\$ 40,000 over 3 years

Goal of project:

Conservation of interspecific interactions, not just individual species making up interactions
Recognize traits that allow species and their interactions to persist in harsh condition

Results to date (including publications):

One of two Canadian populations of yucca is in serious decline, as it has not reproduced sexually for a minimum of 5 years. Other populations at the northern edge reproduce infrequently although they have apparently evolved traits like greatly extended flowering to ensure pollination. However, despite the presence of an appropriate density of moths to flowers in some years, the interaction is frequently precluded by frost, drought, and extreme ungulate herbivory. Further persistence of the interaction is greatly hampered by lack of habitat and destruction of existing habitat by cropping farming practices and cattle grazing.

Csotonyi, J. T. and D. Hurlburt. 1999. Update Status Report for Soapweed (*Yucca glauca*).
Committee on the Status of Endangered Wildlife in Canada.*

Hurlburt, D. D. 2001. Status of the Soapweed (*Yucca glauca*) in Alberta. Alberta Environmental Protection, Wildlife Management Division, Wildlife Status Report Edmonton, AB. (In press)

Community participation and other partners

Our study sites are visited daily by people from Alberta and Saskatchewan during flowering; this provides an excellent opportunity for public education about the conservation of plants and their pollinators, rangeland dynamics, and endangered species. Individuals from southern Alberta and Montana have taken a keen interest in these formal and impromptu tours and have developed a definite sense of stewardship for the rare organisms and unique grassland community in their own backyard. Visitors frequently participate in data collection and are extremely important for identifying unknown populations of yucca.

Ongoing outreach and capacity building:

Because this research is based in a university setting and is part of PhD thesis, results and updates are provided to university students and faculty on a regular basis in the form of a thesis, published papers and seminars. The Alberta yucca/yucca moth system has been recently described in a provincial status report meant for distribution to the public, government environment officials and wildlife managers (Hurlburt, in press); a similar report for the yucca moth is planned for Spring 2001. Further, several naturalist groups and a television crew have been given a summary of the mutualism and research in 1999 & 2000 and I have been approached by two other naturalist groups and staff at Agriculture and Agrifood Canada to give presentations on this research in Summer 2001. This coming month (February 2001) I have been asked to give 3 talks on the dynamics of the yucca/yucca moth system.

Needs to improve project:

Due to the great distances between study sites, we need funds to purchase or rent another field vehicle and to hire a couple more field assistants. At best we can only visit some sites every 3 days to a week. Further, to assess the genetic value of northern edge of range populations we require additional funds to perform genetic analyses. Perhaps more importantly, we need funds to purchase fencing to exclude deer and cattle from several of the smaller yucca populations.

Actual or potential interest in bi- or tri- national cooperation:

Yucca glauca is considered "threatened" in Canada, but has no special recognition in most areas of the United States. Despite not being recognized (in fact it is hated by crop farmers) as being in trouble, populations of yucca in Montana share some of the same critical issues of survival as in Canada. This project generates some interesting concerns about the effects of international boundaries (and the accompanying differences in philosophies of endangered species management) on endangered species.

A9. Project: Multi-functionality on a prairie landscape

Species / ecosystem targeted:

All grasslands

Location of project:

Prairie Canada

Name and address of institution(s) and person(s) responsible for project:

Contact: Bob Sopuck (associated with Delta Waterfowl Foundation and University of Brandon)
Box 31, Lake Audy, Manitoba, R0J 0Z0
email: sopuckmc@escape.ca *Tel:*(204)848-2964 *Fax:* (204)848-2964

Size of project (funding or other):

Policy and Economics project that is applicable to all grasslands (Prairie) landowners.

Goal of project:

Integration of people, landscape and the economy.

Results to date (including publications):

Produced a policy paper that has been adopted by Manitoba's largest farm policy organization:
Keystone Agricultural Producers www.kap.mb.ca

Community participation and other partners

Policy adopted by Manitoba's largest farm policy organization

Ongoing outreach and capacity building:

Ongoing / in development
Will eventually expand to other provinces

Needs to improve project:

Need economic analyses of how the adoption of such a policy would affect sectors such as: grain and livestock sector, value added products sector, farm machinery, farm chemicals...

Actual or potential interest in bi- or tri- national cooperation:

Has international experience and is very interested. The policy is similar to those adopted in Europe, whereby funds directed to landowners are earmarked for environmental concerns and are therefore not counter to multilateral trade agreements (WTO...)

A10 Project: Canadian Landbird Monitoring Strategy & Grasslands birds Monitoring Project:**Species / ecosystem targeted:**

Grassland species (focus on Sprague's Pipit & Baird's Sparrow)

Location of project:

Canadian Grasslands

Name and address of institution(s) and person(s) responsible for project:

Brenda Dale; 4999 98th Avenue; Edmonton; Alberta T6B 2X3
email: brenda.dale@ec.gc.ca *Tel:* (780)951-8686 *Fax:* (780)495-2615

Size of project (funding or other):

30 000\$ per year

Goal of project:

Improving our knowledge of population levels and ecology of grassland birds
Supplement breeding bird survey / habitat monitoring / uncover reasons behind declines / economics of land use / non-game evaluation of NAWMP /

Results to date (including publications):

There are 10+ reports, 3 papers and an upcoming website.

Community participation and other partners:

Universities / Public at large / Provincial government agencies / Ducks Unlimited / Cattleman's association

Ongoing outreach and capacity building:

Workshops for cattlemans' association.

Needs to improve project:

Money, time, and efforts in communication. Need to involve more partners.

Actual or potential interest in bi- or tri- national cooperation:

Work with the Colorado bird observatory. Interested in future tri-lateral cooperation.

A11. Project: Ecology and management of crested wheatgrass invasion in northern mixed prairie

Species / ecosystem targeted:

All SCCC in northern mixed prairie are impacted by habitat loss caused by this exotic plant species invasion

Location of project:

Alberta and Saskatchewan, Canada

Name and address of institution(s) and person(s) responsible for project:

Darcy C. Henderson and Dr. M. Anne Naeth
Department of Renewable Resources
University of Alberta
751 General Services Building
Edmonton, Alberta, Canada
T6G 2H1

email: darcyh@ualberta.ca

Tel:(780) 492-2960

Fax:(780) 492-4323

Size of project (funding or other):

Four year (2001-2005), \$200,000.00 research program, involving at least one PhD and one MSc student

Goal of project:

Identify the need to control crested wheatgrass through a natural experiment to assess soil, plant and animal community differences between cultivated & seeded CWG stands, with native prairie and prairie invaded by CWG. Determine the mechanisms by which CWG invades native prairie through investigations into dispersal ability, and experiments designed to determine seed viability in the environment over time, and seedbed requirements at multiple scales. Finally, gradient analyses and a control experiment will be used to determine which native species can compete effectively with CWG and which control methods are economically and ecologically most efficient. Synthesis of these results will produce a conceptual model of CWG invasion and impacts, a spatial model of landscape susceptibility to invasion, and recommendations for range managers and reclamation/restoration practitioners for preventing invasion, and eradicating CWG from already invaded areas.

Results to date (including publications):

Projects set to start in April 2001

Community participation and other partners

In-kind support from Agriculture and Agri-Food Canada, Alberta Agriculture, Food and Rural Development, Alberta Environment and Grasslands National Park. Financial support thus far from Alberta energy companies (Alliance Pipeline, Husky Energy, BP-Amoco, AEC). Applications pending for funding from National Science and Engineering Research Council and Alberta Agriculture Research Institute.

Ongoing outreach and capacity building:

At present project has been promoted within the agricultural and reclamation industries to garner in-kind and financial support. In future, field tours for livestock producers, reclamation practitioners and public land managers are planned to demonstrate the scope of the problem and the active research to determine the cause and options for control.

Needs to improve project:

Crested wheatgrass invasion is not merely an ecological problem, but an economic one as well. Once native prairie has been invaded by CWG, the availability of rangeland forage changes and livestock producers will be financially impacted. Calculation of actual costs for supplemental feeding, haying or reseeding are needed to demonstrate this problem in terms of dollars and cents.

Actual or potential interest in bi- or tri- national cooperation:

Crested wheatgrass is recognized as one of the most invasive exotic plant species in the northern Great Plains. As such, we have gained interest domestically (Canada) from agricultural producers, reclamationists and public land managers (including national parks). There is certainly potential for combined efforts in the future with US federal and state agencies and producer organizations in the northern Great Plains region (Montana south to Nebraska).

A12. Project: Wildlife Habitat Canada

Species / ecosystem targeted:

Prairie Canada

Location of project:

Prairie Canada

Name and address of institution(s) and person(s) responsible for project:

Jean Cinq-Mars, Executive Director, Wildlife Habitat Canada
7 Hinton Avenue North; Suite 200
Ottawa, Ontario, K1Y 4P1

email: reception@whc.org *Tel:* (613)722-2090 *Fax* (613)722-3318

Size of project (funding or other):

Millions of dollars since inception

Goal of project:

Wildlife Habitat Canada (WHC) is a national, non-profit, conservation organization which was established in 1984 by Environment Canada, provincial wildlife agencies and conservation agencies within the wildlife habitat coalition. WHC works through partnerships with communities, landowners, governments, non-government organizations, and industry to find effective solutions to complex environmental problems facing wildlife habitat.

WHC's strategic approach to conservation is based on sound science which allows us to:

- _ act as a CATALYST to develop new and innovative conservation programs,
- _ ASSESS policies and legislation that affect habitat, as well as the status of habitats in Canada, and
- _ SUPPORT high quality conservation initiatives across Canada to build capacity to conserve habitat on the ground.

Results to date (including publications):

- 2 prairie habitat status assessments (86-91 / 91-2001)
- crop damage policy analysis
- endangered species habitat needs / stewardship

Community participation and other partners:

Funded 30 million dollars of projects; 1000s of partners; 15000 landowners affected

Ongoing outreach and capacity building:

All projects involve outreach

Needs to improve project:

(completed by David Neave, former executive director)
Need habitat objectives. Need effective linkages with USA.
Need to integrate wildlife conservation with agriculture.

Actual or potential interest in bi- or tri- national cooperation:

Very interested

A13. Project: Grasslands National Park: prairie dog conservation initiatives, endangered species conservation, habitat acquisition, prairie restoration, post-grazing restoration.

Species / ecosystem targeted:

Native prairie ecosystem: northern mixedgrass prairie

Location of project:

Southern Saskatchewan

Name and address of institution(s) and person(s) responsible for project:

Pat Fargey, Parks Canada
Ecosystem Management Program Manager, P.O. BOX 150
Val Marie, SK, S0N 2T0
email: pat_fargey@pch.gc.ca Tel: (306)298-2166 Fax:(306)298-2042

Size of project (funding or other):

Proposed Park area is 900 KM²; 450 Km² aquired in 8 parcels

Goal of project:

Protect a representative piece of northern mixedgrass prairie

Results to date (including publications):

Draft management plan and 3 progress reports

Community participation and other partners:

Agriculture and Agrifood Canada; several universities; Prairie Conservation Action Plan (approximately 30 stakeholder organisations); Consultative committee; Study advisory committee

Ongoing outreach and capacity building:

3 personnel:
-Cooperative outreach in local area: Wetland/ Prairie conservation
- School programs

Needs to improve project:

Money from personel to look at integrated management with a broader scope.

Actual or potential interest in bi- or tri- national cooperation:

Already participates in coordinated/ integrated survey of Swift Fox
Interested in further cooperation

A14 Project: Physiological and population ecology of the northernmost prairie dogs

Species black-tailed prairie dog (*Cynomys ludovicianus*)

Location of project Grasslands National Park, Saskatchewan, Canada

Name and address of Institution (s) and person (s) responsible for project

David Gummer, Curator of Mammalogy
Provincial Museum of Alberta
12845 – 102 Avenue, Edmonton AB T5N 0M6 Canada

Size of project (funding or other) \$ 150,000 (1997 – 2001; 6 partners)

Goal of project Assessment of biogeographic variation in physiological and ecological characteristics of prairie dogs, so as to increase the efficacy of population and habitat forecast models for predicting and mitigating the effects of climate and landscape change for prairie dogs and associated biota.

Results to date (including publications) Gathered long-term, empirical database describing seasonal hibernation profiles, aboveground activity patterns, microclimate (including underground), individual body size and mass variation, survival, and reproductive parameters, and proceeding to use these data as the basis for new energetic, population, and habitat models that will assist in **prioritizing potential conservation strategies.**

Community participation and other partners: Canadian Wildlife Foundation, Canadian Wildlife Service (Environment Canada), Grasslands National Park (Canadian Heritage), Natural Sciences and Engineering Research Council of Canada, Saskatchewan Environment and Resource Management, University of Saskatchewan

Ongoing outreach and capacity building Presentations of background information and current findings via internet websites, scientific publications, public reports prepared for partner organizations, and formal presentations at international, specialized scientific conferences.

Needs to improve project: Need to make range-wide comparisons among prairie dog populations in other locales and associated climates, through collaboration with other researchers and simultaneous, parallel applications of similar techniques in other portions of the geographic range of prairie dogs.

Actual or potential interest in bi or tri-national cooperation Need international partners and study populations located in the United States and Mexico to facilitate range-wide comparisons and models.

A15 Species: in support of Burrowing Owls and other grassland birds

Name of project:

Reducing direct and indirect impacts of insect control agents

Location of project:

southern Alberta (Lethbridge Research Centre)

Name and address of Institution (s) and person (s) responsible for project

Dr. Dan L. Johnson, AAFC Research Centre (and Univ Lethbridge), PO Box 3000, Lethbridge, AB Canada T1J 4B1

JohnsonDL@em.agr.ca

Size of project (funding or other): varies for subprojects; \$300,000 total

Goal of project: selection of methods of management of grassland insects that will preserve biodiversity and limit impacts on grassland birds and their food supplies

Results to date (including publications):

safety testing in lab and field; diet studies

1) Avian safety testing of new alternatives to chemical insecticides, including entomopathogenic fungi

Example outputs:

Johnson, Smits, Jaronski and Weaver. 2001? Assessment of Health and Growth of Ring-necked Pheasants Following Consumption of Infected Insects or Conidia of Entomopathogenic Fungi *Metarhizium anisopliae* var *acridum* and *Beauveria bassiana* from Madagascar and North America. Submitted to J. Toxicol. and Ecosystem Health (Feb 8, 2001)

Smits, J.E., D.L. Johnson and C. Lomer. 1999. Pathological and physiological responses of ring-necked pheasant chicks following dietary exposure to the fungus *Metarhizium flavoviride*, a biocontrol agent for grasshoppers in Africa. *Journal of Wildlife Diseases* 35: 194-203.

2) Protection of insects needed for diets of ground-nesting grassland songbirds, from insecticidal overkill. Example output so far:

Martin, P.A., D.L. Johnson, D.J. Forsyth, and B.D. Hill. 1998. Indirect effects of the pyrethroid insecticide, deltamethrin on reproductive success of Chestnut-collared Longspurs. *Ecotoxicology* 7: 89-97.

Martin, P.A., Johnson, D.L., Forsyth, D.J., and Hill, B. 2000. Effects of two grasshopper control insecticides on the food resources and reproductive success of two species of grassland songbird. *Environ. Toxicol. Chem.* 19: 2987-2996

3) Impact of grazing intensity on insect diversity and abundance available as a resource for insectivorous birds. (Field experiment in progress, Onefour, AB. Experimental plots totalling 2400 ha.

4) Identification of insects in the diets of Burrowing Owls. Tables of insect family, genus, species and biomass. (To be submitted, in collaboration with J. Schmutz, K. Clayton, M. Cammer, others.)

5) Research on nonchemical control of grasshoppers and locusts. Twenty journal articles, many of which are reviewed in our recent *Ann. Rev. Entomol.* paper:

Lomer, C.J., Bateman, R.P., Johnson, D.L., Langewald, J., and Thomas, M.B. 2001. Biological control of locusts and grasshoppers. *Annual Review of Entomology* 46: 667-702.

Community participation and other partners: Funding has been received from NSERC; Agriculture and Agri-Food Canada; Canadian Wildlife Service; World Wildlife Fund; Canadian Wildlife Federation; industry

Ongoing outreach and capacity building: continuing field research at extensive rangeland research station; new project and positions in 2001-2002

Needs to improve project:

Actual or potential interest in bi or

tri-national cooperation

A. 16 Name of Project: Alternate Land Use Services

Species:

All species inhabiting the Canadian Prairie landscape

Location of Project: Province of Manitoba with expansion to the Provinces of Saskatchewan and Alberta

Name and Address of Institutions and persons responsible for Project: Mr. Ian Wishart c/o Keystone Agricultural Producers, 1-1313 Border St. Winnipeg, Manitoba, Canada R3C 0X4; Mr. Robert Sopuck - Delta Waterfowl Foundation, home address Box 31 Lake Audy, Manitoba, Canada R0J 0Z0, 1-204-848-2964 ph; Mr. Jim Tokarchuk, Prairie Farm Rehabilitation Administration, 200-303 Main St., Winnipeg, Manitoba R3C 3G7 ; NOTE: Please refer all correspondence and phone calls to R. Sopuck

Size of Project: Currently spending approximately \$10,000 CDN with potential of over \$100,000CDN for initial projects

Goal of Project:

To provide a conservation alternative to normal farm support programs by providing incentives to farmers to deliver environmental services to the rest of society. These services include biodiversity conservation, carbon sequestration, improved water quality, and diverse Prairie landscapes.

Results to date:

Production of a policy paper by Keystone Agricultural Services (KAP) (Manitoba 's largest farm organization) entitled "Alternate Land Use Services (ALUS) – Multi-functionality in Practice: Broadening the Base of Agricultural Income." This paper, displayed on KAP's website www.kap.mb.ca, has been approved in principle and is being widely discussed in Canada.

Community Participation and Other Partners :

In addition to the Prairie Farm Rehabilitation Administration within Agriculture and Agri-Food Canada, the project partners include Keystone Agricultural Producers (Manitoba's largest general farm organization), the Delta Waterfowl Foundation (North America's oldest waterfowl conservation organization), and the Manitoba Sustainable Agriculture Association.

Ongoing outreach and capacity building:

The paper is listed on the KAP website and is being discussed across Canada. Government and non-government organizations are analyzing the ALUS concept to determine the best delivery mechanism.

Needs to improve project:

The needs for this project are: to broaden the understanding of the ALUS concept both in the farm and urban communities, to analyze the changes that would take place in terms of the local economy if the ALUS concept is implemented, to determine the most effective method of delivering this program based on the experience of other programs like the North American Waterfowl Management Plan and the U.S. Conservation Reserve Program.

Actual or Potential interest in bi or tri-national cooperation:

Trade and environment issues transcend national borders and agricultural policy is a key element. As well, many of the species of common conservation concern are migratory and their conservation depends upon, in many cases but especially waterfowl, tri-national cooperation. The ALUS project has the potential to conserve vast areas of land on the Canadian Prairies and will contribute to international conservation progress. Specifically, the Delta Waterfowl Foundation has demonstrated 90 years of international cooperation in the field of waterfowl conservation and this will continue.

MEXICO

B1. Influencia de los perros llaneros (*Cyomys ludovicianus*) en la diversidad biológica de la flora y fauna en los pastizales naturales de México.

Objetivo:

Determinar el papel de los perros llaneros en la diversidad biológica regional y los cambios en la diversidad resultante de la reducción de los perros llaneros y la expansión de mezquite en el noroeste de Chihuahua.

Participantes:

Dr. Gerardo Ceballos, Biol., Juan Cruzado, M. en C. Patricia Manzano, Dr. Rurik List, Biol. Jesús Pacheco, M. en C. Georgina Santos.

Organizaciones involucradas: Instituto de Ecología-UNAM.

B2. Reintroducción del hurón de patas negras (*Mustela nigripes*) en el complejo Janos-Nuevo Casas Grandes, Chihuahua.

Objetivo:

Establecimiento de una población viable de hurones en las colonias de perros llaneros de Janos y Nuevo Casas Grandes.

Participantes:

Dr. Gerardo Ceballos, Dr. Rurik List, Biol. Jesús Pacheco

Organizaciones involucradas: Instituto de Ecología-UNAM, U.S. Geological Survey.

B3. Electrocutación de rapaces en el complejo de perros llaneros Janos-Nuevo Casas Grandes, Chihuahua.

Objetivo:

Evaluar el problema de electrocutación de aves rapaces (incluyendo a *Buteo regalis*) en las líneas de distribución eléctrica en las colonias de perros llaneros de Chihuahua y buscar soluciones.

Participantes:

M. en C. Patricia Manzano, Rick Harness.

Organizaciones involucradas:

Proyecto Alas, Unidos para la Conservación, CFE.

B4. Análisis espacial del paisaje para la determinación de sitios potenciales para la reintroducción del lobo gris mexicano en Sonora, Chihuahua y Coahuila, México”

Especie: Lobo Mexicano (*Canis lupus baileyi*)

Objetivo:

Identificar sitios con potencial para la reintroducción del lobo gris en México.

Ubicación del proyecto:

Norte de Sonora y Chihuahua (Sierra Madre Occidental y tierras bajas circundantes) y sierras y pastizales de Coahuila.

Participantes:

M.V.Z. Marcela Araiza Ortiz (Guanajuato), Nahum Sánchez Morales (Nuevo León) y Rurik List

Organizaciones participantes:

Subcomité Técnico Consultivo para la Recuperación del Lobo Mexicano, Naturalia, A.C., Instituto de Ecología-UNAM.

Nombre y dirección de la (s) institución (es) y persona(s) responsables del proyecto:

Naturalia, A.C.
Petén 437, Col. Vertiz-Narvarte, México 03600, DF.

Tamaño del proyecto (financiamiento, número de participantes u otro)

Presupuesto del proyecto durante el año 2000: \$ 253,000.00 M.N.

Objetivo del proyecto

Determinar mediante trabajo de análisis espacial del paisaje y trabajo de campo, cuales son los sitios más adecuados, desde el punto de vista Biológico y social, para reintroducir grupos familiares de lobos mexicanos, que puedan crear una población viable a largo plazo en México.

Resultados logrados hasta la fecha (incluyendo publicaciones)

Se ha completado el trabajo de gabinete y se está realizando el trabajo de Campo (avance en un 50 %).

Participación de la comunidad u otros socios

El Grupo Norteamericano Defenders of Wildlife, el Subcomité Técnico Consultivo Nacional para la Recuperación del Lobo Mexicano, comunidades locales.

Labores de capacitación y entrenamiento

Entrenamiento de personal para el trabajo de campo, mediante el apoyo de Defenders of Wildlife en Arizona, EUA.

Necesidades para mejorar el proyecto

Equipo para trabajo de campo (2 camionetas en mejor estado, equipos de campismo), recursos para viáticos, salarios y gastos generales del proyecto.

Interés en la cooperación bi- o trinacional al presente o futuro

Este proyecto ya cuenta con cooperación binacional pero es deseable incrementarla.

B5. Estudio casi terminado sobre unas 25 especies de plantas raras, amenazadas o en peligro de extinción comunes a México y EEUU en el área fronteriza de Texas y Tamaulipas.

Objetivo:

Proyecto:

Estudio autoecológico de *Manihot walkerae* Croizat (Euphorbiaceae), especie de importancia agronómica a nivel mundial, en peligro de extinción en Texas y presente aun en México en donde se desarrolla en áreas de pastizal y selva baja caducifolia. De esta investigación se concluyó y presentó una tesis de maestría en ciencias y otra más está en proceso.

Objetivo:

Participantes:

Francisco González-Medrano. Insituto de Biología , UNAM

B6.- Estudio autoecológico de *Manihot walkerae* Croizat (Euphorbiaceae), especie de importancia agronómica a nivel mundial, en peligro de extinción en Texas y presente aun en México en donde se desarrolla en áreas de pastizal y selva baja caducifolia.

De esta investigación se concluyó y presentó una tesis de maestría en ciencias y otra más está en proceso.

Objetivo:

Participantes:

Organizaciones involucradas:

B7. Determinación del origen migratorio de murciélagos nectarívoros narigudos *Leptonycteris curasoae*, mediante el análisis isotópico.

Objetivo:

Determinar movimientos migratorios en poblaciones de *L. curasoae* mediante la determinación de su composición isotópica de hidrógeno.

Participantes:

Dr. Luis Gerardo Herrera M.

Organizaciones involucradas:

Instituto de Biología, UNAM.

B8. Estudio de las poblaciones de berrendo sonoreño (*Antilocapra americana sonoriensis*), en la región de los Vidrios en la Reserva de la Biosfera El Pinacate y Gran Desierto de Altar, Sonora, México.

Objetivo:

Determinar la calidad del hábitat dentro del área de estudio de las poblaciones de Berrendo Sonorense. Determinar los factores y actividades productivas que amenazan de forma negativa a las poblaciones de Berrendo Sonorense y Determinar el intercambio de las poblaciones de Berrendo Sonorense entre México y Estados Unidos.

Participantes:

Rafaela Paredes.

Organizaciones involucradas:

IMADES

B9. Evaluación de supervivencia de crías y control de depredadores en las áreas del Sueco-Moctezuma y el Valle Colombia en Chihuahua y Coahuila.

Objetivo:

Monitoreo de la población reintroducida en el Valle Colombia en Coahuila y el Sueco-Moctezuma, la Perla en Chihuahua, para evaluar la supervivencia de crías y el control de coyotes.

Participantes:

Manuel Valdés.

Organizaciones involucradas:

Unidos para la Conservación A.C.

B10.- Proyecto: Conservación en las praderas de Janos, Chihuahua.

Especie: Perrito de las praderas cola negra (*Cynomys ludovicianus*)

Objetivo:

Colaborar en la conservación de las praderas de Janos-Nuevo Casas Grandes, mediante el desarrollo de una estrategia que a corto plazo permita evitar la destrucción del hábitat y las colonias de los perritos de las praderas (especie clave en este ecosistema), y a mediano y largo plazos favorezca la conservación de la zona, mediante el desarrollo de alternativas que permitan satisfacer las necesidades de los habitantes locales sin destruir la biodiversidad local.

Ubicación del proyecto:

Noroeste de Chihuahua, México, al este de la Sierra Madre Occidental (30 ° 57.8'N, 30 ° 37.5' N, 108 ° 12.5' W, 108 ° 40.3' W).

Nombre y dirección de la (s) institución (es) y persona(s) responsables del proyecto:

Mauricio Cotera
Naturalia, A.C. Petén 437, Col. Vertiz-Narvarte, México 03600, DF.
Instituto de Ecología, UNAM (México, D.F.); The Wildlands Project (Arizona, EUA)

Tamaño del proyecto (financiamiento, número de participantes u otro)

Presupuesto del proyecto durante el año 2000: \$ 107,000.00 M.N.

Objetivo del proyecto:

Colaborar en la conservación de las praderas de Janos-,Chih., mediante el desarrollo de una estrategia que a corto plazo permita evitar la destrucción del hábitat y las colonias de los perritos de las praderas (clave en este ecosistema), y a largo plazo favorezca la conservación de la zona.

Resultados logrados hasta la fecha (incluyendo publicaciones):

Se ha iniciado un proyecto de educación ambiental, que incluye la publicación de una historieta y un cartel. Se está produciendo un documental (50 % de avance)

Participación de la comunidad u otros socios:

El Grupo Norteamericano The Wildlands Project, el Instituto de Ecología de la UNAM, la Fundación Pradera. Comunidades locales.

Labores de capacitación y entrenamiento

Necesidades para mejorar el proyecto

1 Camioneta para trabajo de campo, recursos para viáticos, salarios y gastos generales del proyecto.

Interés en la cooperación bi- o trinacional al presente o futuro

Este proyecto ya cuenta con cooperación binacional pero es deseable incrementarla.

B11. Determinación de sitios potenciales para la reintroducción del lobo mexicano mediante un análisis espacial de paisaje en Sonora, Chihuahua y Coahuila, México.

Objetivo:

Analizar aspectos de la estructura de los parches remanentes de hábitat del lobo mexicano en tres estados del noroeste de México, así como la matriz circundante a los parches, utilizando criterios que pueden influenciar la permanencia y dispersión de los lobos para identificar sitios potenciales para la reintroducción.

Participantes:

Marcela Areli Araiza Ortiz.

Organizaciones involucradas: Naturalia A.C. y Defenders of Wildlife.

USA

C1. High Plains Partnership

The High Plains Partnership is a public-private initiative to conserve the unique grasslands and declining fish and wildlife resources of the High Plains region. The goal of the initiative is to prevent, reverse, and ultimately remove the need for Endangered Species Act protection of

declining High Plains trust resources, while also helping to protect the sustainability of traditional lifestyles and economic uses of this predominately privately-owned agricultural area. The initiative is a collaborative effort between the Service's Southwest and Mountains and Plains regions (2 and 6), and between the Endangered Species and Partners for Fish and Wildlife programs, working with other federal agencies, states, tribes, and the High Plains agricultural community.

The High Plains has traditionally contained few listed species, and few Endangered Species Act (ESA) conflicts. In 12-month findings for petitions to list the lesser prairie-chicken and the black-tailed prairie dog under the Endangered Species Act, the Service found that the listing of these species is warranted but precluded by other higher priority listing actions. These species, therefore, have been added to the Service's candidate species list. To prevent further loss of habitat, further decline of these at-risk species, or the potential for increased litigation, the High Plains Partnership is taking a holistic approach to ecological restoration to lessen or eliminate the need for ESA listing of candidate species, or to recover those species currently listed.

C2. Prairie Partners

Prairie Partners is cooperatively working with private landowners throughout the High Plains by developing "on the ground" projects to manage for burrowing owls. Through the development of a programmatic Candidate Conservation Agreement with Assurances and/or Safe Harbor Agreement, an opportunity exists with these landowners to manage for additional at-risk prairie species such as the mountain plover, ferruginous hawk, black-tailed prairie dog, long-billed curlew and lesser prairie-chicken.

C3. Comanche Pool Prairie Resource Foundation

The Comanche Pool Prairie Resource Foundation is a privately-funded, non-profit organization dedicated to providing demonstration, education and consultation to regenerate the natural resources and to promote the economic growth of the rural community. In cooperation with the Natural Resources Conservation Service, U.S. Fish and Wildlife Service, and the National Fish and Wildlife Foundation, the Comanche Pool Prairie Resource Foundation is assisting private landowners in a 14 county area of south-central Kansas and north-central Oklahoma in the development and implementation of voluntary conservation plans directed at providing a net conservation benefit to species-at-risk such as the lesser prairie-chicken, the black-tailed prairie dog, and other High Plains keystone species.

C4. Project: Conservation Strategy for the ferruginous hawk in the Great Plains

Species: Ferruginous Hawk

Location of project: the Great Plains

Name and address of Institution (s) and person (s) responsible for project:

USDA Forest Service (John Sidle and Dan Svingen) are working with the Rocky Mountain Bird Observatory under contract to draft a conservation strategy for the species in the Great Plains

Results (including publications) :

To date the project has just begun and we would like to join with other entities to complete this strategy

C5. Project: Monitoring the black-tailed prairie dog in the Great Plains

Species: Black-tailed prairie dog

Location of project: Great Plains

Name and address of Institution (s) and person (s) responsible for project:
USDA Forest Service (John Sidle)

Results (including publications) :

USDA Forest Service purchased in 2000 several examples of one-meter resolution satellite imagery of small areas of National Grasslands from Oklahoma to North Dakota with the view to evaluating their usefulness in monitoring the status of black-tailed prairie dogs. The imagery is quite good and individual prairie dog mounds are visible. Working with the U.S. Geological Survey, we have produced a manuscript describing a monitoring plot design using North Dakota as a prototype. We offer the use of such high resolution imagery as the best method to monitor the prairie dog.

Needs to improve project:

The task now is to do what we did for North Dakota for the other Canadian provinces and Mexican and U.S. states.

Actual or potential interest in bi or tri-national cooperation

This would be an excellent project for all three countries to participate in.

C6. Species: Black-footed Ferret

Location of project: Janos area of Chihuahua

Name and address of Institution (s) and person (s) responsible for project:
Pete Gober, USFWS, Pierre, South Dakota
pete_gober@fws.gov

Results (including publications) :

Ferrets have been reintroduced into six states. We are limited to further releases by small prairie dog town sizes and by the threat of sylvatic plague.

Needs to improve project:

We need to enlarge the reintroduction area to reduce the risk of all prairie dog towns being eliminated by plague. The Janos complex is the largest remaining relatively pristine dog town left in North America and is the best remaining site to release black-footed ferrets.

Actual or potential interest in bi or tri-national cooperation:

The Mexican government is very interested in the project. The prairie dog/ferret association is critical to the health of the grassland ecosystem. Canadian Wildlife Service has also expressed an interest (albeit not a priority) in eventually reintroducing ferrets to Canada.

Ongoing outreach and capacity building

There is a definite need for outreach and capacity, especially in Spanish and directed at local landowners

C7. Species: Whooping Crane

Location of project: Canada; U.S. (NWT; TX, FL)

Name and address of Institution (s) and person (s) responsible for project:

U.S. - Tom Stehn tom_stehn@fws.gov
Canada - Brian Johns brian.johns@ec.gc.ca

Results (including publications) :

Captive breeding in Canadian and U.S. facilities has led to stabilization of Wood Buffalo-Aransas flock and reintroduction of cranes into Florida. A migratory flock is planned to be established between Wisconsin and Florida for 2002.

Needs to improve project:

Establish other populations besides the Wood Buffalo-Aransas one to prevent a catastrophe from wiping out the population. Need outreach along the migration route to prevent poaching. Need to start working with Mexico for eventual extension of flocks by protecting habitat.

Actual or potential interest in bi or tri-national cooperation

Canada and U.S. have an MOU to cooperate. Mexico has expressed an interest in extending flocks into the southern historic range.

Ongoing outreach and capacity building

U.S. has done some outreach

C8. Species: Burrowing Owl

Location of project: Regions 1, 2, and 6 (western U.S.)

Name and address of Institution (s) and person (s) responsible for project:

Stephanie Jones, USFWS, Denver
stephanie_jones@fws.gov
(303-236-8155x253)

Results (including publications) :

Status Assessment and Conservation Plan, due out in mid-year
Status Survey, due out soon

Needs to improve project:

?

Actual or potential interest in bi or tri-national cooperation

Canada and U.S. are interested in working together.

C9. Project: America's Wild Grasslands: Rediscovering and Restoring Forgotten Landscapes

Species :

Black-tailed prairie dog (*Cynomys ludovicianus*)
Black-footed ferret (*Mustela nigripes*)
Bison (*Bison bison*)

Location of project :

Great Plains states in the United States including Arizona, Colorado, Kansas, Montana, Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota, Texas, Wyoming

Name & address of Institution and person(s) responsible for project :

National Wildlife Federation
Rocky Mountain Natural Resource Center
2260 Baseline Road

Boulder, Colorado 80302

Project Lead:

Catherine Johnson, Director RMNRC

Grasslands Specialists:

Cathy Carlson, Rick Bachand (attending SCCC workshop)

Sr. Scientist:

Steve Torbit, PhD

Size of Project

\$800,000 annually

Goals of Project

1. To ensure the 100% retention of public ownership and functionality, and the ecologically sound management of federal lands (USA) within the historic range of our nation's native grasslands.
2. To restore large areas of native grasslands, including a nearly full complement of native wildlife species, on participating Native American reservations, through maintaining and diversifying existing partnerships with tribal governments and leaders.
3. To enhance grasslands habitat and native species diversity on private lands within the historic range of our nation's native grasslands by maximizing and facilitating the use of technical, educational and appropriate economic incentives.
4. To protect, enhance and restore sufficient habitat for the long-term survival of keystone and indicator native grasslands species.
5. To identify and restore ecologically and geographically significant lands where it may be possible to manage for and restore the full complement of grasslands species.

Significant Results to date (including publications)

- NWF successfully petitioned the US Fish & Wildlife Service for listing of the Black-tailed prairie dog (*Cynomys ludovicianus*) under the Endangered Species Act. The "warranted but precluded" finding by the US Fish & Wildlife Service acknowledged this species' decline and sets the stage for further conservation efforts
- NWF has published a significant educational website on Grasslands, grassland wildlife, and conservation issues related to grasslands. The website is found at <http://www.nwf.org/grasslands/>
- The Rocky Mountain Natural Resource Center of NWF in Boulder, CO has been actively engaged in the public planning process associated with the Northern Great Plains National Grasslands Environmental Impact Statements (EIS) and Resource Management Plans (RMP). These RMP's cover roughly 2.4 million acres of public grasslands in the US States of North Dakota, South Dakota, Wyoming, and Nebraska. In the current proposed RMP, NWF has been able to integrate protections for grassland wildlife and restoration of riparian zones.
- *National Wildlife*, NWF's flagship publication has featured several articles on grassland wildlife and conservation intended to reach our membership. *National Wildlife Productions*, the television, film and multimedia arm of NWF, has produced nature videos on Bison and black-tailed prairie dogs that have been aired to a national audience on PBS (Nature) and TBS Superstation respectively.

Community participation and other partners :

Through NWF's states' affiliate organizations in all 50 US states, the organization is able to facilitate local participation by individuals and work collaboratively with community organizations toward grassland conservation goals. We also work in partnership with our partners committed to grasslands conservation. Just a few examples include the Inter-Tribal Bison Cooperative, Sierra Club, Badlands Conservation Alliance (SD), Missouri Prairie Foundation (MO), Grasslands Coalition (MO), and the Tallgrass Legacy Alliance (KS).

Ongoing outreach and capacity building :

The Rocky Mountain Natural Resource Center of NWF has two full-time positions (Regional Organizers) dedicated to building support for our conservation campaigns and collaboratively working with our state's NWF affiliate organizations on local grassland conservation efforts. In turn, each state NWF affiliate is actively engaged in communities statewide on education and outreach related to local environmental issues including grassland conservation. NWF's outreach publications including *International Wildlife*, *National Wildlife*, *Ranger Rick* as well as our library collection of nature education videos (*National Wildlife Productions*), reports, and other media strive to educate and inspire all generations of the general public

Needs to improve project :

NWF is working to stimulate the support of grassroots network of activists to further grassland conservation efforts. We are currently completing an outreach video that will aid us in the recruitment and training of new grassland supporters.

Actual or potential interest in bi or tri-national cooperation :

NWF has been actively engaged in cooperative conservation efforts with agencies in Mexico (black-tailed prairie dog and black-footed ferret) and Canada (bison management).

- 1) Senior NWF staff (Tom Dougherty) is a member of the Black-Footed Ferret Recovery Team which has worked with the US Fish & Wildlife Service and the Institute for Ecology to take the necessary steps for the black footed ferret reintroduction.
- 2) NWF is working with the Instituto de Ecologia to support collaborative conservation work in the Janos, Mexico area.
- 3) Senior Scientist (Dr. Steve Torbit) has been developing connections to the bison management programs in Wood Buffalo National Park and a provincial park in Manitoba, Canada. In addition, he has worked on swift fox (*Vulpes velox*) restoration with a group in Saskatchewan, Alberta, and Montana. It appears now the best opportunity for restoration of the swift fox is on the Blackfoot Indian Reservation in Montana and NWF is coordinating with it's Canadian partners toward that end.

C10. Project: Population and community structure of grassland birds on wintering grounds in northern Mexico: influence of domestic and native herbivores

Species: Wintering grassland species (SAVP, BASP, GASP, VESP, CCLO, BRSP, CHSP, WEME, HOLA, etc)

Name and address of Institution (s) and person (s) responsible for project

Martha Desmond
Department of Fishery and Wildlife Sciences, PO Box 30003, MSC 4901, New
Mexico State University, Las Cruces, NM 88003

Size of project (funding or other) ~ \$70,000

Goal of project:

- (1) Examine the distribution and habitat associations of grassland adapted birds in northern Mexico.
- (2) Examine the impacts of grazing by native (black-tailed prairie dogs, pocket gophers, bannertailed kanagoo rats) and domestic (cattle) herbivores on avian diversity and abundance.
- (3) To examine lifehistory characteristics such as site fidelity within and between winters, distribution by sex (through genetic analysis), single and mixed species flocking and solitary individuals.

Results to date (including publications):

Avian diversity positively related to vegetative structure such as horizontal depth, shrub height, and negatively related to shrub number. Diversity was also positively related to prairie dog density and negatively related to banner-tailed kanagoo rat density. Avian abundance was negatively related to visual obstruction reading, negatively related to % canopy cover, negatively related to cattle dung density transects negatively related to banner-tailed kanagoo rat density and positively related to prairie dog density. Abundance of secretive sparrows (Bairds, grasshopper and savannah sparrows) were positively related to litter depth and the horizontal depth of the vegetation and negatively related to the number of shrubs. Vesper sparrow abundance was negatively related to visual obstruction reading, positively related to shrub height and pocket gopher presence. Chestnut collared longspur abundance was negatively related to % canopy cover, shrub height, dung density and bannertailed kanagoo rats and positively related to prairie dog density and litter depth. Horned lark abundance was negatively related to visual obstruction reading, % grass, litter depth, shrub numbers, dung density and banner-tailed kanagoo rat density. Sprague pipit abundance was positively related to the % grass and negatively related to the number of shrubs. Cassins sparrow abundance was positively related to the number of shrubs.

The data set of avian diversity and abundance in the black-tailed prairie dog complex and adjacent grasslands in the Janos area was looked at separately. Avian diversity was highest on well managed grasslands with prairie dogs (private ranches) and adjacent plots without prairie dogs and significantly lower on overgrazed ejido lands with prairie dogs. Avian abundance was significantly higher on well managed prairie dog colonies (private ranches) and significantly lower on adjacent plots without prairie dogs and overgrazed edijo lands.

Genetic analysis to look at sex ratios on winter grounds is ongoing.

Community participation and other partners

Alberto Lafon Terrazas, Facultad Zootecnia, Universidad Autonoma de Chihuahua
Felipe Chavez Ramirez – World Wildlife Fund, Monterrey Mexico
New Mexico State University
Texas A&M University-Kingsville

Ongoing outreach and capacity building

There is a tremendous need to work with ejidos on grazing practices and the economic benefits of well managed grasslands. To draw interest, local residents could also be involved in mist-netting and banding grassland birds where they could also learn about grassland health. Pilot projects (in highly visible areas) to subdivide large pastures into smaller units and promote deferred grazing would be a good educational tool.

Needs to improve project:

This project is close to completion. However there is need to expand this project to encompass the entire Chihuahuan Desert Ecoregion. Ideally a 5-yr study (minimum) involving partners in the United States and Mexico distributed throughout the region such that the entire Chihuahuan Desert is covered. Criteria would be developed for the selection of study sites and data collected so that there would be a good understanding of wintering patterns throughout the region over the 5-year period.

Actual or potential interest in bi or tri-national cooperation

This is a bi-national collaboration could easily be expanded to include all 3 countries.

C11. Project: Burrowing Owl (*Athene cunicularia*) Nesting Strategies and Reproductive Success in Urban vs Native Habitats and Among Burrow Types

Species: Burrowing Owl

Location of project :

southern New Mexico

Name and address of Institution (s) and person (s) responsible for project

Martha Desmond

Department of Fishery and Wildlife Sciences, PO Box 30003, MSC 4901, New

Mexico State University, Las Cruces, NM 88003

Size of project (funding or other):

This project supports one M.S. student at New Mexico State University

Goal of project:

- (1) Compare reproductive success of burrowing owls in urban and grassland habitats.
- (2) Examine factors influencing reproductive success in different habitat types including different burrow systems.
- (3) Examine occupancy rate and factors influencing reproductive success in newly re-established black tailed prairie dog (*Cynomys ludovicianus*) colonies.

Results to date (including publications): This study is just beginning it's second field season. Results from the first field season indicate that reproductive success was similar among urban and grassland habitats but factors influencing reproductive success differed between the two habitat types. Nearest-neighbor distance was significantly shorter in newly re-established prairie dog colonies (mean of 65 m) than in urban environments (mean of 155 m) where owls primarily nested in rock squirrel colonies. Reproductive success for owls nesting in urban environments was negatively influenced by vegetation height and positively influenced by the number of nesting pairs in the area. Owls may benefit from the presence of other nesting owls. For owls nesting in re-established prairie dog colonies reproductive success was negatively influenced by nearest-neighbor distance indicating that nest sites were limiting in this habitat and owls were forced to nest closer together.

Community participation and other partners

M.S. student at NMSU – Daniele Beradelli

Community participation – Mesilla Valley Audubon Society and community member with owl nesting close to their residence or business.

Ongoing outreach and capacity building

Projects like this in urban environments have a tremendous opportunity to reach out and educate the community.

Needs to improve project:

Although many burrowing owls overwinter in Las Cruces the majority of the breeding population here is migratory. There is a tremendous need to determine where these birds overwinter. Wintering numbers in the prairie dog complex around Janos Mexico are not high, possibly because of the large abundance of predators present during the winter months.

Actual or potential interest in bi or tri-national cooperation

I think there is tremendous opportunity for tri-national cooperation on burrowing owl related projects.

C12. Grassland bird wintering ecology on the gulf coast of south Texas and northern Mexico

Species: All wintering grassland birds focusing on the *Ammodramus* complex

Location of project :

South Texas, USA and northern Tamulipas, Mexico

Name and address of Institution (s) and person (s) responsible for project

Martha Desmond

Department of Fishery and Wildlife Sciences, PO Box 30003, MSC 4901, New Mexico State University, Las Cruces, NM 88003

Size of project (funding or other):

Funding will be through the U.S./Mexico

Affairs Office of the National Park Service and likely other branches of the Park Service.

Goals of project:

- (1) To examine distribution and habitat partitioning of grassland birds (particularly *Ammodramus* sparrows) in southern Texas and northern Mexico.
- (2) To examine fidelity within and between winters and determine if *Ammodramus* sparrows hold territories on grounds.
- (3) To quantify roost-site characteristics for *Ammodramus* sparrows on winter grounds along the gulf coast.
- (4) To estimate densities of wintering coastal grassland birds in southern Texas and northern Mexico.

Results to date (including publications)

This project will begin in the winter of 2001/2002 and will continue for 2-3 years.

Community participation and other partners:

Parnters: Ken McMullen, Padre Island National Seashore

Darrell Echols, Pardre Island National Seashore

Jock Whitworth, Padre Island National Seashore

Felipe Chavez Ramirez – World Wildlife Fund, Monterrey, Mexico

Community participation in both the United States and Mexico will be an essential for this project. This project will be conducted by a MS or Ph.D. student from either the U.S. or Mexico. A group of 10-20 volunteers in south Texas and northern Mexico will be necessary to assist with flush-netting birds into mist-nets on study sites.

Ongoing outreach and capacity building

Because this project will rely heavily on the use of volunteers from the communities in south Texas and northern Mexico the opportunity for community outreach is excellent. Not only will people learn about issues related to grassland birds but also the importance of maintaining native coastal prairie habitat.

Needs to improve project:

This project is an enormous undertaking. We know little about the wintering ecology of coastal *Ammodramous* sparrows (nothing about these birds in Mexico), in part because they are secretive and difficult to study. I likely will have complete funding for a M.S. but would like to take on a Ph.D. student from Mexico to run this study. This study would be more informative if it had at least 3 years of data (as opposed to the currently anticipated 2 years)

Actual or potential interest in bi or tri-national cooperation

This project is bi-national collaboration.

C13 Project: Migrant stopover ecology for birds in arid environments

Location of project Species:

Any grassland migrants passing through southern New Mexico

Name and address of Institution (s) and person (s) responsible for project

Martha Desmond
Department of Fishery and Wildlife Sciences, PO Box 30003, MSC 4901, New
Mexico State University, Las Cruces, NM 88003

Size of project (funding or other)

– I'm waiting to hear on funding. If funded it will be \$75,000 over 3 years and involve a M.S. or Ph.D. student.

Goal of project:

- (1) To examine the importance of habitat quality and resource availability to grassland birds during migration.
- (2) To determine if short distance migrants are diurnal or nocturnal migrants.
- (3) To determine if select species differ in migration timing or habitat use by age class and sex

Results to date (including publications):

Not yet initiated

Community participation and other partners:

Not well defined. Other aspects of this project will have partners in Israel and Jordan.

Ongoing outreach and capacity building

Needs to improve project: The scope of this project has not been well defined yet and funding is not clear. Knowledge of the migratory ecology of grassland birds is not well understood. We do not fully understand how these birds migrate or what constitutes a migratory stopover site.

Actual or potential interest in bi or tri-national cooperation
Potential for cooperation between all three countries

C14. Project: Habitat selection by wintering sparrows in southern New Mexico: influence of habitat quality and seed availability

Species:

Brewer's sparrow, sage sparrow, lark bunting, chipping sparrow, western meadowlark, horned lark

Location of project :

Southern New Mexico

Name and address of Institution (s) and person (s) responsible for project

Martha Desmond
Department of Fishery and Wildlife Sciences, PO Box 30003, MSC 4901, New
Mexico State University, Las Cruces, NM 88003

Size of project (funding or other): This project supports one Masters student at New Mexico State University

Goal of project:

- (1) To determine if seed type and abundance influences the diversity, abundance, and distribution of grassland birds on winter grounds.
- (2) To examine the relationship between vegetation structure and floristic composition and the diversity and abundance of grassland-adapted birds.

Results to date (including publications):

This is the second winter of data Collection. Results from the first year indicate that avian abundance was positively related to percent canopy cover, percent horizontal cover, and grass height. Avian species richness was positively related to horizontal cover, litter depth, grass height, and the number of shrubs. The two most common species on plots have been Brewer's sparrows and sage sparrows. None of the habitat variables collected were found to influence Brewer's sparrow abundance. Sage sparrow abundance was positively influenced by grass height and shrub density. Data related to floristic composition of the vegetation and seed diversity and abundance are still to be analyzed.

Community participation and other partners:

Masters student (New Mexico State University) Steve Niemela
Cooperators: New Mexico State University, Jornada Long-Term Ecological Research Station, Bureau of Land Management, Fort Bliss Military Reservation

Ongoing outreach and capacity building:

Needs to improve project:

Need to improve technology for isolating seeds from soil samples. Understanding the seedbase and how it influences grassland bird diversity and abundance in habitat patches is an important component of understanding the distribution, abundance and diversity of grassland birds in different years.

Actual or potential interest in bi or tri-national cooperation

This project is nearing completion.

C15 Project Grassland Bird Use of Agricultural Borders on Wintering Grounds in Northern Mexico

Species:

SAVP, VESP, BRSP, CCSP, BASP, WCSP, GTTO, etc.

Location of project :

Chihuahua, Mexico

Name and address of Institution (s) and person (s) responsible for project

Martha Desmond
Department of Fishery and Wildlife Sciences, PO Box 30003, MSC 4901, New Mexico State University, Las Cruces, NM 88003

Size of project (funding or other) Project is currently limited to western Chihuahua. Funding for this is about \$5,000

Goal of project: To examine the use of agricultural field borders by grassland-adapted birds during the winter months in Chihuahua. I hope to expand this to a broader area (including agricultural areas in northern Mexico) and include the migratory period.

Results to date (including publications):

We have just finished collecting the first data set

Community participation and other partners :

Alberto Lafon – Universidad Autonoma de Chihuahua
Cesar Mendez – PROFAUNA, Chihuahua, MX

Ongoing outreach and capacity building

Certain types of agricultural field borders appear to be heavily used by grassland-adapted birds. One potential benefit of this project would be for educational partners in northern Mexico (ie PROFAUNA) to work with ejidos and other farming communities to maintain field borders that would benefit certain species of grassland birds.

Needs to improve project:

This project should be expanded to include other areas of Chihuahua and northern Mexico to determine what species are using agricultural field borders in the winter and during migration. Agricultural borders may be important for some species of wintering and migrant grassland birds however, the management of those borders (border width, vegetation type and structure) appear to be an important influence avian use. We need a better understanding of what species are using this habitat type, condition of birds using these areas,

Actual or potential interest in bi or tri-national cooperation
This currently is a bi-national cooperative project.

C16. Project: Wintering Raptor and Prairie Dog Survey

Natasha B, Kotliar, Principal Investigator
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Colorado Natural Heritage Program
4512 McMurry Ave.
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Project goals:

- 1) To initiate long-term surveys of wintering raptors in grassland regions that coincide with the ranges of ferruginous hawks and prairie dogs (non-hibernating species or populations).
- 2) To improve our understanding of the relationships between wintering raptors and prairie dogs.

Regional scope:

We conducted a pilot program in eastern Colorado during winter 1997, the success of which resulted in subsequent continuation of the project each winter. In winter 1999, we also ran a small program in northern Chihuahua at the Janos-Nuevo Casas Grandes complex of black-tailed prairie dogs. Subsequently, USFWS Region 2 provided funds to expand the project into USFWS Region 2 and northern Mexico, with a focus on borderland regions. This winter (2000-2001), we began the expansion, primarily within New Mexico/northern Mexico. As the project extended southward, we discovered that we may need to consider the winter relationships between raptors and gophers/ground squirrels/kangaroo rats as well. Thus far, we have 54 randomly and non-randomly placed routes in Colorado, 35-40 routes in New Mexico (including one each on the Gray, Ladder, and Armendaris ranches, where prairie dogs were recently reintroduced), one in the Texas panhandle, 3 in extreme southeastern Arizona, and 8 in northern Chihuahua/Sonora.

We are preparing a project website that will allow survey participants to enter their data on-line and provide access to summarized data. We also plan to use this website to give participants "downloadable" datasheets, instructions, newsletters, etc., thus reducing the costs of mailings and coordinator time.

SUMMARY OF METHODS:

To conduct the Colorado surveys, we have recruited dozens of volunteers and several agency personnel. [Many of our volunteers also volunteer for the North American Breeding Bird Survey (BBS), and when possible, these volunteers run their BBS routes for the winter raptor survey.] To conduct surveys in the expansion area, we enlisted BBS and other volunteers where possible; contractors were hired to survey otherwise uncovered routes.

Most of our survey routes are conducted along existing, appropriate (i.e., based on grassland habitat) BBS routes (randomly selected locations). To sample locations with high concentrations of prairie dogs, we also set up non-random routes through such areas (6 in Colorado, 6 in New Mexico, 6 in Mexico, one in Arizona). All routes are 24 miles long with one stop every 1 mile for a total of 25 stops per route.

Survey routes are traveled by vehicle. At each stop, the participant gets out of the vehicle, scans the stop 360 degrees (with binoculars) for 3 minutes, and records all raptors and prairie dogs observed (unless already counted at a previous stop). Scopes and one extra minute per bird may be used to confirm species identifications. Raptors/prairie dogs observed between stops that have not been counted previously--and are not likely to be counted at subsequent stops--are also recorded and identified as between-stop observations. Each route is run one time each winter in January.

Results:

In 2001-2002, we will conduct data analyses on the 1997-2001 data. Based on summaries and initial analyses of the data, we are finding some important patterns, including species (esp. ferruginous hawks) that associate very strongly with prairie dogs (or other clusters of small, non-hibernating mammals), species that do not associate with prairie dogs, and declines in the number of prairie dogs and towns observed.

Project needs:

Thus far, the project has been very successful. This is due primarily to the willingness and expertise of the many volunteers and agency personnel able to assist us. However, as we expand in more remote regions, we anticipate having greater difficulty recruiting and retaining volunteers, especially in Mexico where the pool of potential participants (i.e., people with raptor ID skills) that have access to vehicles is very limited. Patricia Manzano-Fischer of Proyecto Alas (Project Wings) has agreed to serve as a coordinator/trainer for the Mexican aspect of this project. For the short term, we may need to hire trained Mexican biologists and provide vehicles for the Mexican surveys. In addition, much of northern Mexico remains somewhat roadless; while undoubtedly this is part of what makes the potential for grassland conservation so great across the Mexican Plateau, it also increases the difficulties associated with setting up randomly located 25-mile routes in appropriate habitats.

Through the upcoming SCCC meeting in Nuevo Casas Grandes and subsequent international communications, we would like to:

1. Recruit additional volunteers and gather information about other possible survey sites (both in Mexico and the U.S.).
2. Make contact with Mexican biologists/professors/students conducting grassland bird work and who might like to collaborate on the winter raptor/prairie dog survey project.
3. Explore the vehicle-needs issue for potential Mexican participants.
4. Receive feedback on the perceived value of this project for overall conservation of North American grasslands and their native diversity.
5. Receive, and be placed on, a list of contacts for those working within the realm of grassland bird work and related conservation/research projects.

C17. Project: GRASSLAND PASSERINE DEMOGRAPHICS IN THE MIXED-GRASS PRAIRIE OF NORTHEASTERN MONTANA

Species:

- a) Mountain Plover
- b) Baird's Sparrow and Sprague's Pipit
- c) Burrowing Owl

Location of project:

Montana, USA

Name and address of Institution (s) and person (s) responsible for project

Stephanie L. Jones, U.S. Fish and Wildlife Service, Migratory Bird Coordinator, P.O. Box 25486
DFC, Denver, CO 80225; e-mail: Stephanie_Jones@fws.gov

Size of project (funding or other):

All totaled, about US\$65,000 per year

Goal of project:

- a) Evaluating documents and other data on the listing petition for the Mountain Plover;
- b) Passerine demographics project goals are to evaluate the status and reproduction of these species;
- c) Burrowing Owl, completing a status assessment and conservation plan.

Results to date (including publications):

- a) Evaluation of data and range; evaluation of effects of disturbance.
- b) Presentations at Ornithological meetings; reports, including Status Assessment and Conservation Plan and (draft) Birds of North America account for Baird's Sparrow.
- c) Draft Status Assessment and Conservation Plan for the Burrowing Owl

Community participation and other partners:

Many, particularly in the Mountain Plover and passerine demographic work.

Ongoing outreach and capacity building:

Not sure what is refers to.

Needs to improve project:

More sharing and work in Canada and Mexico; basic data on the winter habitat of these species is critical to the evaluation of the threats and limiting factors.

Actual or potential interest in bi or tri-national cooperation:

High, I think there can be great benefits from tri-national cooperation with these projects and species.