



## Spring Breeding Habitat Conditions

The Alberta Prairie Pothole Region (PPR) is dry with only 40% of average precipitation for much of the region. Waterfowl production from this area is expected to be low. While western Saskatchewan is also very dry, conditions in the south central and southeastern prairie and parkland regions are good to very good. Pintail nesting effort is expected to be good, broods have recently appeared, and productivity should be good in these areas. In the Manitoba PPR, wetland conditions are generally good to excellent owing to winter snowfall and recent rains. However, spring weather has been cool and wet with temperatures dipping below or near zero several times during May and early June. This is expected to have a negative effect on brood survival, especially for early-nesting species like pintail. On the U.S. side, wetland conditions are generally good to excellent in the Dakotas having improved dramatically over 2008 owing to heavy winter snowpack over much of the region. Duck populations have responded and pintail broods have begun appearing. The outlook for duck production in Alaska is good along the coast and fair to good in the interior. The Hudson Bay lowlands are fair owing to unseasonal cold temperatures. Further information at <http://flyways.us/status-of-waterfowl/pilot-reports>.

## Integrating Habitat and Harvest Management for Northern Pintails

Since the previous newsletter, the Pintail Action Group has completed a work plan for the assembly of a continental demographic model for the northern pintail incorporating habitat and harvest influences (copy at <http://wildlife.siuc.edu/PAG/About.asp>). This modeling effort will serve as a key component in addressing the challenge posed by recent reviews to better integrate objectives of waterfowl habitat and population management in a single modeling framework. Model development will occur through a process of iterative prototyping, with the initial focus on capturing the right general structure of the model. Detail and functionality will be added over time. The model design will be driven by the decision contexts provided by the North American Waterfowl Management Plan, and the setting of annual harvest regulations.

We hope that this work will also build a solid platform for developing future population models for other species of conservation concern. The work plan outlines the objectives, timelines and lead investigators for various components of this work. We have recently advertised and received applications for a post-doctoral position to begin this work based with the U.S. Geological Survey at the Patuxent Wildlife Research Center (Laurel, Maryland). The position will be part of an interagency research team, including scientists from USGS, U.S. Fish and Wildlife Service, Ducks Unlimited, Environment Canada, UC Davis, and Utah State University, among others. The research team will provide substantial support in the overall framework for the model, access to appropriate data, and review of model details.





## Linking Central Valley Joint Venture Habitat to Pintail Body Condition

Conservation efforts of the Central Valley Joint Venture (CVJV) and similar programs improve habitats to increase winter food supplies for waterfowl under an assumption that this will maintain or improve body condition of wintering waterfowl. To test this assumption, a cooperative research project (USGS-Western Ecological Research Center, Univ. of California-Davis, USFWS, CVJV, California Department of Fish and Game, California Waterfowl Association) investigated body condition of ducks wintering in the Central Valley. Researchers studied body condition of northern pintail, mallard, American wigeon, northern shoveler, and green-winged teal in the Central Valley during 2006-2008, by analyzing body composition of ducks they collected and weighing and measuring hunter-shot ducks. They then compared the results with similar data collected before or during the early years of the CVJV. With few exceptions, the ducks studied were in better condition at the end of winter during 2006-2008 than during the earlier years. While the efforts of the CVJV may be only one factor contributing to this change, these results support the hypothesis that improved habitat conditions have resulted in birds being in better condition during winter. Preliminary results of both parts of the study (hunter check station data, collected-duck data) will be presented at the 2009 North American Duck Symposium. Contact Joe Fleskes ([joe\\_fleskes@usgs.gov](mailto:joe_fleskes@usgs.gov)) for more information.



## SONEC Update

The southern Oregon-northeastern California (SONEC) region of the Intermountain West is a critically important spring-staging area for northern pintails and other Pacific Flyway waterfowl. Spring-flooded pasture and hay are important habitats used by waterfowl and shorebirds migrating through SONEC. Biologists with the USGS-Western Ecological Research Center recently completed the second field season of a project to determine spring food habits of ducks and measure density of important food items in these SONEC habitats. Analysis shows that diet of the 3 duck species collected in spring 2008 varied greatly. Seeds (especially reed canary grass and sedges) comprised the bulk of the northern pintail diet in these habitats whereas vegetation comprised the bulk of the American wigeon diet; northern shovelers consumed invertebrates and seeds in similar proportion. Work is currently underway to complete sorting and analysis of the habitat samples. Once completed, information from this project will be used to guide habitat conservation programs of the Intermountain West Joint Venture (IWJV). Funding for the project is provided by USGS, USFWS, IWJV, NRCS-American Bird Conservancy, and Ducks Unlimited, Inc., with Oregon Department of Fish and Wildlife, California Department of Fish and Game, and numerous land owners cooperating. Contact Joe Fleskes ([joe\\_fleskes@usgs.gov](mailto:joe_fleskes@usgs.gov)) for more information.





## Bayer CropScience and Ducks Unlimited Partner to Increase Winter Wheat in the PPR: Pintails benefit.

Winter wheat is an important nesting habitat for waterfowl in the Prairie Pothole Region as it removes the danger of nest destruction by spring seeding operations. This is especially beneficial to early nesting pintail which commonly nest in residual cropland stubble. As such, it is a crop that is being promoted by Ducks Unlimited Canada (DUC) as part of the *Pintail Initiative*, a suite of conservation programs targeted to improve pintail production in prairie Canada. Recently, Bayer CropScience and Ducks Unlimited joined forces to launch a North American project called "[Winter Cereals: Sustainability in Action](#)".

"By working with Ducks Unlimited, we want to expand the practice of growing winter cereals across the prairies in Canada and the United States," says Bill Buckner, head of North America and President and CEO of Bayer CropScience LP. "We recognize winter wheat is an excellent crop that provides economic advantages to growers when included in cropping rotations while also enhancing waterfowl and other wildlife habitats."

Partnering with Ducks Unlimited under this program, Bayer CropScience will make a commitment of \$20 million over five years to:

- Enable significant research to develop new winter wheat varieties adapted to prairie climatic conditions while providing grower incentives, technical support and education programs;
- Promote improvements and research in agronomic practices; and

- Conduct waterfowl and environmental research to ensure a sustainable habitat and production system.

"As leaders in the agriculture industry we see this initiative as an important and tangible part of delivering on our commitment to sustainable agriculture," says Buckner.

From a waterfowl conservation standpoint, one of the key limiting factors for continental waterfowl populations is a lack of nesting cover on the prairies. Ducks Unlimited Canada's research has shown that the density of hatched nests in winter wheat fields is 24 times greater than in spring wheat.

"This partnership between Bayer CropScience and Ducks Unlimited has the potential to provide unprecedented opportunities for expanding winter wheat on the prairies," said Don Young, Executive Vice President of Ducks Unlimited. "This is research that will not only benefit Ducks Unlimited waterfowl conservation and habitat efforts in the Prairie Pothole Region in Canada and the U.S., but also provide tremendous advantages to agricultural communities."

"Partnering with Bayer CropScience is a great example of how a sustainable vision for the agricultural landscape includes both profitable agriculture and habitat conservation," says Jeff Nelson, Ducks Unlimited Canada's Executive Vice President. "Ducks Unlimited Canada is dedicated to working with farmers and the agricultural industry to find pragmatic approaches to waterfowl habitat conservation."





## Pintails at the 5<sup>th</sup> North American Duck Symposium

Look for the following pintail related presentations at the 5<sup>th</sup> [North American Duck Symposium and Workshop](#), Toronto, Ontario, Canada. August 17-21, 2009.

### *Oral Presentations:*

**Landscape Composition and Demography of Northern Pintails (*Anas acuta*) in the Southern Canadian Prairies.** *Terry A. Kowalchuk and Robert G. Clark*

**Integrating Habitat and Harvest Management for Northern Pintails: Concepts, Challenges and Progress.** *Robert G. Clark, G. Scott Boomer, Michael C. Runge, Michael G. Anderson, James H. Devries, John M. Eadie, Mark Koneff, Joseph P. Fleskes, Dave Haukos, David N. Koons, Todd Sanders, Robert Trost, and Wayne Thogmartin*

**Estimating Prairie-wide Pintail Production with Habitat-linked Models.** *James H. Devries*

**Nesting Ecology of Pintails in Prairie Canada.** *James H. Devries and Karla L. Guyn*

**Use of a Lincoln Estimator to Explore Temporal Patterns in Northern Pintail Sex Ratio and Population Dynamics.** *James S. Sedinger and Christopher A. Nicolai*

**Increased Winter Habitat Improves Body Condition of Ducks in the Central Valley of California.** *Joseph P. Fleskes, Michael R. Miller, Gregory S. Yarris, Douglas R. Thomas, and John M. Eadie*

### *Poster Presentations:*

**Incubation Rhythms and Nest Success of Mallards (*Anas platyrhynchos*) and Northern Pintails (*Anas acuta*) in Southwestern Alberta, Canada.** *Everett E. Hanna*

## Recent Publications

Clark, R.G., K.A. Hobson and L.I. Wassenaar. 2009. [Corrigendum — Geographic variation in the isotopic \( \$\delta D\$ ,  \$\delta^{13}C\$ ,  \$\delta^{15}N\$ ,  \$\delta^{34}S\$ \) composition of feathers and claws from lesser scaup and northern pintail: implications for studies of migratory connectivity.](#) *Canadian Journal of Zoology* 87(6): 553-554.

Derksen, D. 2008. [Assessment of virus movement across continents: using Northern Pintails \(\*Anas acuta\*\) as a test.](#) Progress report. Alaska Science Center. Anchorage, AK

Devries, J. H., L. M. Armstrong, R. J. Macfarlane, L. Moats, and P. T. Thoroughgood. 2008. [Waterfowl nesting in fall-seeded and spring-seeded cropland in Saskatchewan.](#) *Journal of Wildlife Management* 72:1790-1797.

Koehler, A.V., J.M. Pearce, P.L. Flint, J. C. Franson and H.S. Ip. 2008. [Genetic evidence of intercontinental movement of avian influenza in a migratory bird: the northern pintail \(\*Anas acuta\*\).](#) *Molecular Ecology* 17(21): 4754-4762.

Moon, J.A. and D.A. Haukos. 2009. [Factors affecting body condition of northern pintails wintering in the Playa Lakes region.](#) *Waterbirds* 32(1): 87-95.

Moon, J.A., and D.A. Haukos. 2008. [Habitat use by northern pintails wintering in the Playa Lakes Region.](#) *Proceedings of Southeastern Association of Fish and Wildlife Agencies* 62: *In Press*.

Pearce, J. M., A. M. Ramey, P. L. Flint, A. V. Koehler, J. P. Fleskes, J. C. Franson, J. S. Hall, D. V. Derksen, and H. S. Ip. 2009. [Avian influenza at both ends of a migratory flyway: characterizing viral genomic diversity to optimize surveillance plans for North America.](#) *Evolutionary Applications* 2: Published Online: Apr 15 2009.

Tsuji, L. J. S., I. D. Martin, E. S. Martin, A. LeBlanc, and P. Dumas. 2008. [Spring-harvested game birds in the Western James Bay region of Northern Ontario, Canada: the amount of organochlorines in matched samples of breast muscle, skin, and abdominal fat.](#) *Environmental Monitoring and Assessment* 146:91-104.



Page 5

## Project Updates

Pintail Nesting Ecology in Prairie Canada – Analysis ongoing. Contact Jim Devries ([j\\_devries@ducks.ca](mailto:j_devries@ducks.ca)) for further information.

Continental Pintail Banding Analysis – Journal articles in review and preparation. Contact Dr. Dave Haukos ([David\\_Haukos@fws.gov](mailto:David_Haukos@fws.gov)) for further information.

## Announcements

- The **Annual Meeting of the Pintail Action Group** will be held on **August 17, 2009** in conjunction with the 5<sup>th</sup> North American Duck Symposium and Workshop being held in Toronto, Ontario, Canada. Time/Place: 8:30 am - 2:30 pm, Delta Meadowvale Resort and Conference Center - South Studio 3. For updates please check the [NADS website](#).
  - Please contact PAG Chair Jim Devries ([j\\_devries@ducks.ca](mailto:j_devries@ducks.ca)) or PAG Co-Chair David Haukos ([David\\_Haukos@fws.gov](mailto:David_Haukos@fws.gov)) with discussion items for our annual meeting or if you have information items you would like to circulate to the Group.
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