



Wayne Lynch

Sage-Grouse & West Nile Virus



in Alberta

If you see sick or dead sage-grouse, please contact:
**Fish and Wildlife Division
Medicine Hat
(403-528-5228)**



*Wildlife Info
Bulletin #1*

The greater sage-grouse is one of the most marvellous animals on the short-grass prairie. Each spring, males gather on open clay pans and do their dance of love. They joust for the preferred territory at the centre of the dancing ground (or lek), and then make complete fools of themselves. The males stand on their tiptoes, flex their tail and wings, puff up their chest, and inflate the bright yellow air sacs on their throat. They let the air out with a resounding **GALUMP** which echoes across the prairie and apparently is an irresistible love call to the secretive females. Most of the activity starts in the wee hours of the morning and ends an hour or so after sunrise.

Unfortunately there are not nearly as many sage-grouse around as in earlier times. The species is listed as endangered in Canada as well as provincially listed as endangered in Alberta and Saskatchewan. These wonderful birds have disappeared from British Columbia. Over the last few years, Alberta assessed the habitat requirements and population viability in the current sage-grouse range south of Medicine Hat, near Manyberries. This cooperative research project involves the University of Alberta and the Fish and Wildlife Division. The program is extremely successful, largely due to the cooperation and shared concerns from local landowners. In 2003, a new concern for sage-grouse was identified simultaneously in Alberta, Wyoming, and Montana: West Nile virus.

In August 2003, three radio-collared sage-grouse hens in Alberta were found dead, as well as two chicks with one of the hens. Between the Fish and Wildlife Disease lab in Edmonton and the Canadian Cooperative Wildlife Health Centre in Saskatoon, West Nile virus was identified as the cause of death of all five grouse. A similar situation occurred in Wyoming (nine sage-grouse) and Montana (four sage-grouse). Most of the West Nile virus-related mortality occurred from late July to mid-August, a time of peak viral populations and transmission. Mortality due to the virus may add to the ongoing limiting factors faced by sage-grouse and thus, put the species at greater risk. In the Alberta study, mortality during July and August 2003 was significantly greater than during this period in previous years.

West Nile virus is flagged as a new and potentially serious factor affecting sage-grouse survival and population size. A cooperative approach among Fish and Wildlife staff and university researchers, as well as the Alberta Sage-grouse Recovery Team is being used to develop management responses that hopefully may limit the mortality in 2004. During our annual spring count of dancing males in 2004, we found similar numbers as last year. Although we do not know if these are the same individual birds seen in 2003, it is at least encouraging that the spring dance of booming sage-grouse continues for now.



Fish & Wildlife