

MINNESOTA GROUSE AND HARES, 2003

John Erb, Forest Wildlife Populations and Research Group
DNR, Grand Rapids, MN 55744

RUFFED GROUSE. Minnesota's 54th annual ruffed grouse drumming survey was conducted during spring, 2003. A total of 129 routes were completed. In addition to the Division of Wildlife, this year's survey cooperators include Tamarac and Agassiz National Wildlife Refuges, Chippewa and Superior National Forests, Cass and Beltrami County Land Departments, Blandin Paper Company, 1854 Authority, Fond du Lac, Red Lake, Leech Lake, Grand Portage, and White Earth Indian Reservations, Vermillion College, and numerous private individuals. Overall listening conditions were reported as excellent, good, and fair on 62%, 34%, and 4% of the routes, respectively.

While drumming indices remain comparatively low, no regional declines were observed in 2003, suggesting we may be moving into the increase phase of the grouse cycle. Compared to 2002, drumming remained stable in the North-Central (1.0 drums/stop), Northeast (0.6 d/s), and Northwest (1.2 drums/stop) (Fig. 1; Fig. 2). Drumming indices in the Central Hardwoods increased 33% to 0.8 drums/stop, while the Southeast increased 50% to 0.6 drums/stop. Statewide, drums increased 13% to 0.9 drums/stop (Fig. 1; Fig. 2), largely attributable to the increase in the Central Hardwoods.

SHARP-TAILED GROUSE. Male sharptails were counted on leks during spring 2003 by the DNR Wildlife Division, Rice Lake and Agassiz National Wildlife Refuges, and numerous volunteers. A total of 1327 males were counted (711 in the Northwest, 616 in the East-Central) in 2003. Statewide, a 16% increase was observed in the total number of males counted on 170 comparable (i.e., counted in both 2002 and 2003) leks. For the 296 leks surveyed in 2003, 55% were occupied (up 4% from 2002), with an average of 8.4 males per occupied lek (up 12% from 2002).

In the East-Central Range, total numbers of males on comparable leks increased 10% (Fig. 3). Occupied leks averaged 7.3 males (Fig. 4), up 11% from last year, with 58% of the 149 surveyed leks being occupied (up 4% from 2002). The total number of males on comparable leks in the Northwest Range increased 21% (Fig. 3). Occupied leks averaged 9.6 males (Fig. 4), up 10% from 2002, with 53% of the 147 surveyed leks being occupied (up 8% from 2002). Comparison of trends in sharp-tailed and ruffed grouse indices over the past 17 years is shown in Fig. 4.

SNOWSHOE HARES. A total of 36 hares were observed on grouse drumming routes this spring. The 2003 spring hare index of 1.8 hares seen per 100 km is a 140% increase from 2002. The majority (64%) of the hares were observed in the Northeast grouse zone, while 28% were observed in the North-Central zone. A separate hare index computed from the 2002-03 mid-winter furbearer track survey indicates no change from last winter's record high (survey started in 1991) (Fig. 5). Hare numbers appear to be peaking, though notably lower than the 1970's high. If cyclic patterns continue, we will likely see a downturn in hare numbers soon.

Sincere thanks if you participated in these spring surveys.

JE

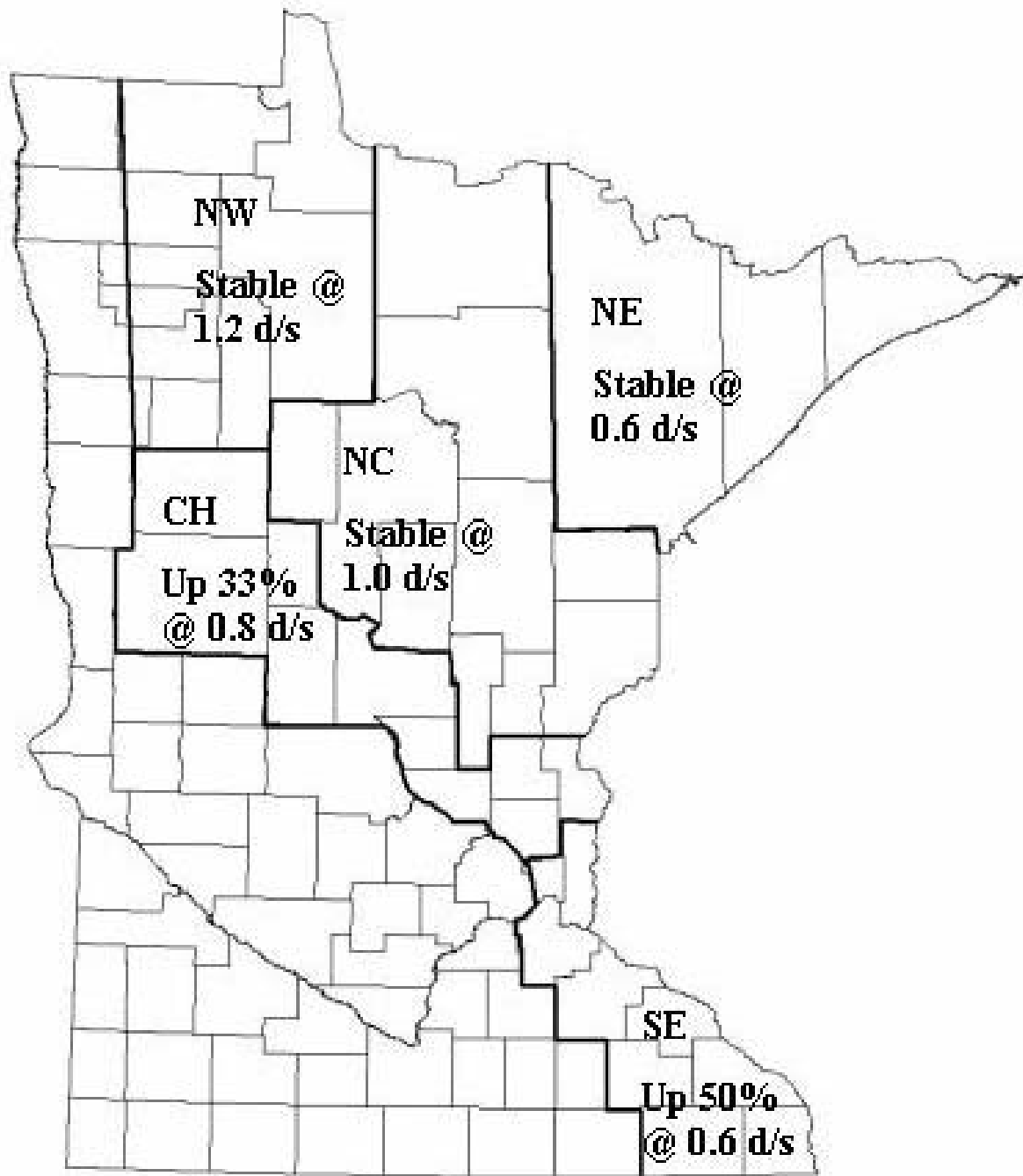


Fig. 1. Changes in regional ruffed grouse drumming indices, 2002 to 2003.

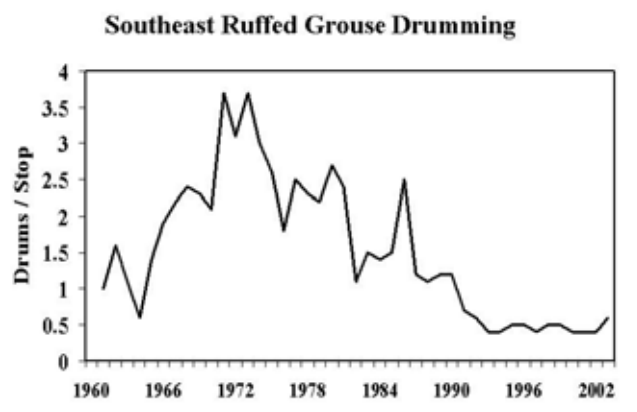
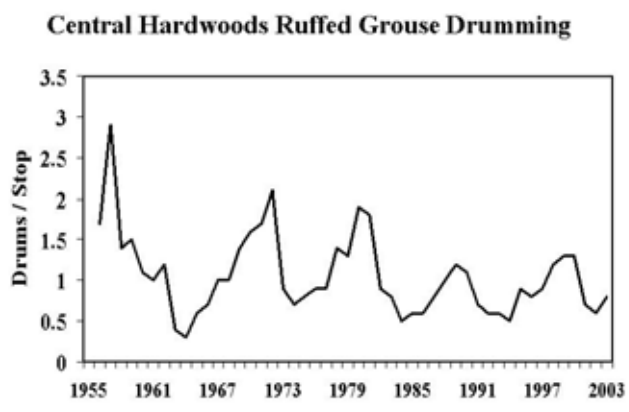
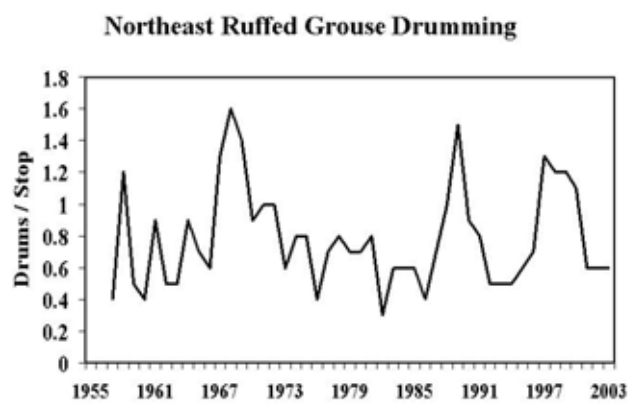
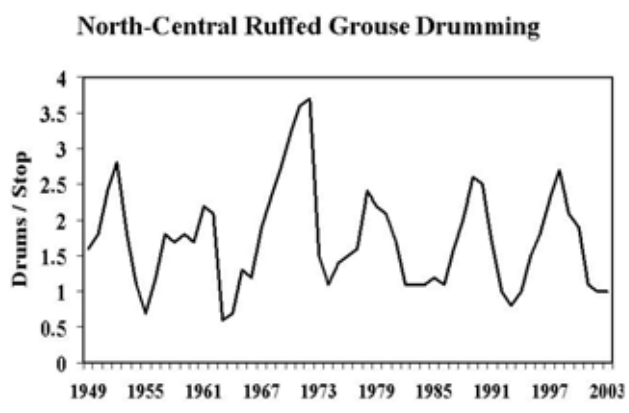
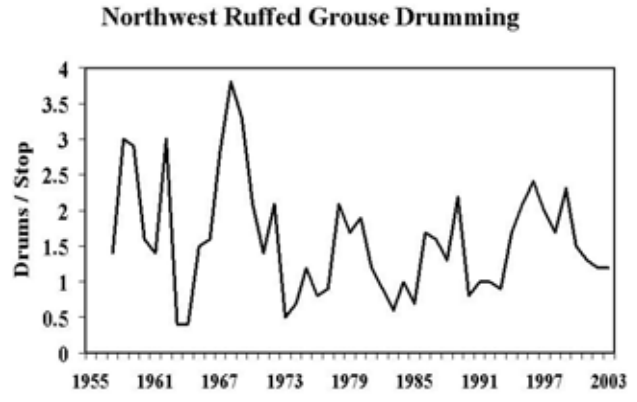
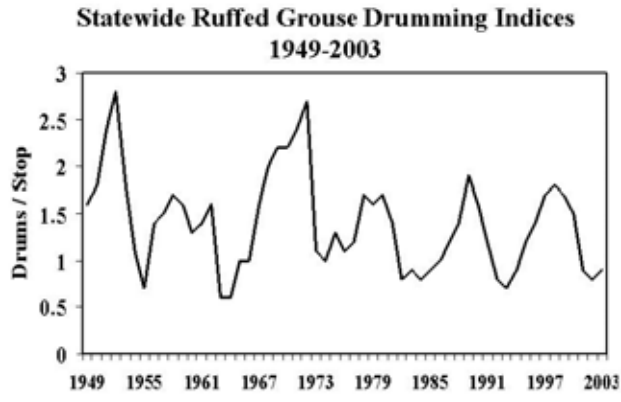


Figure 2. Minnesota's historic statewide and regional ruffed grouse drumming indices.

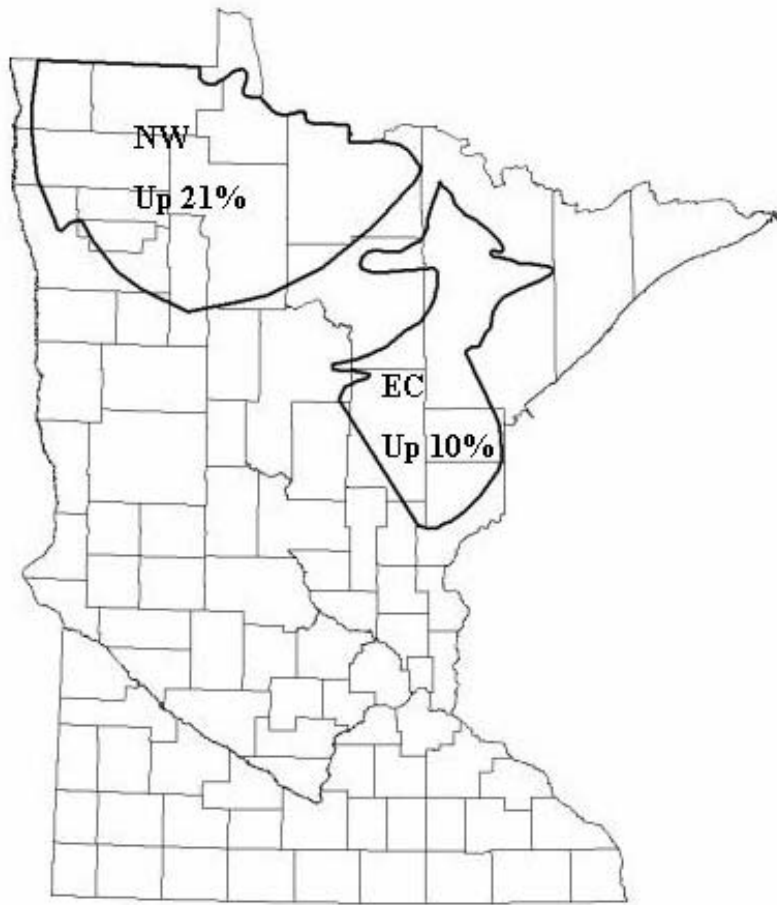


Fig. 3. Regional changes in the number of sharp-tail males counted on comparable leks, 2002 to 2003.

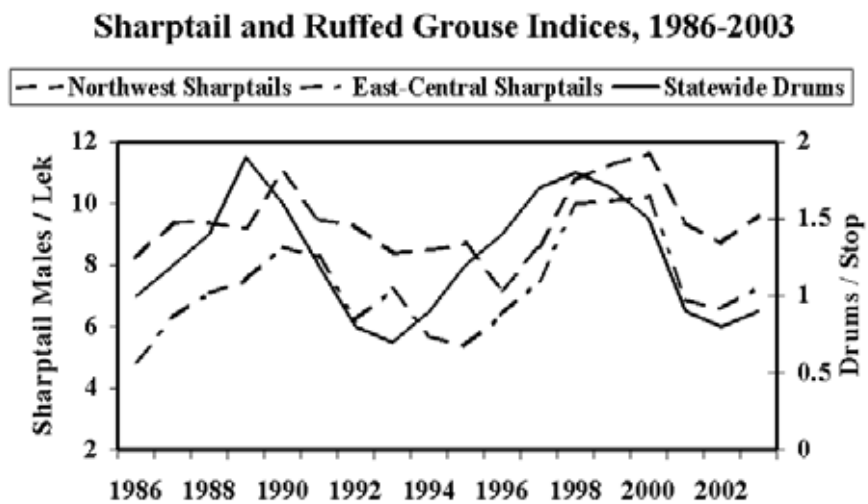


Fig. 4. Ruffed and sharp-tailed grouse survey indices, 1986-2003.

Snowshoe Hare Index Comparison

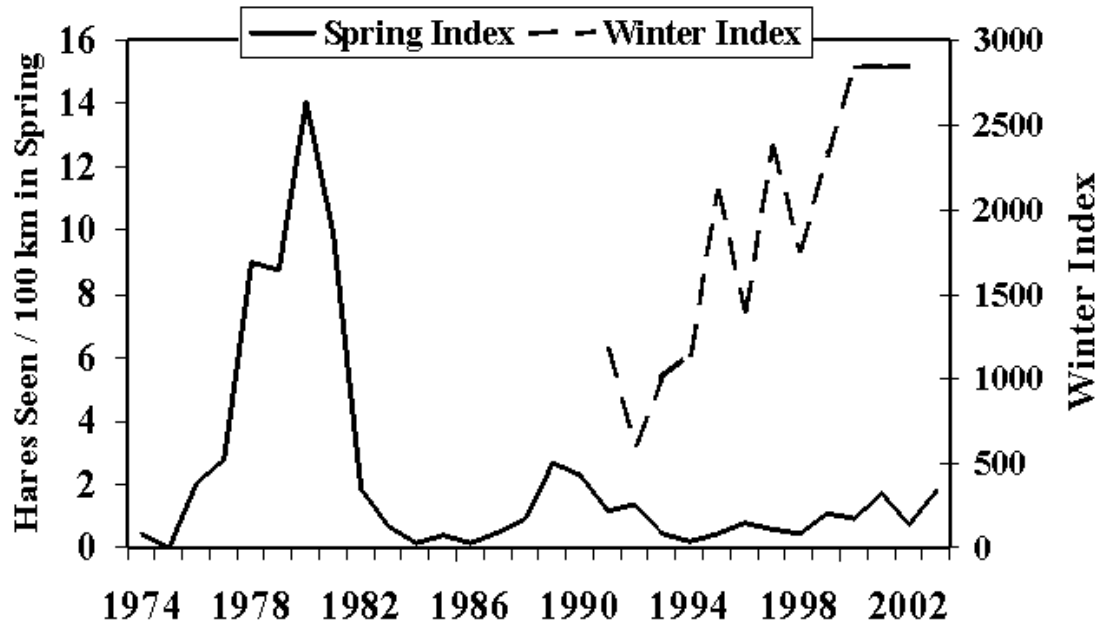


Figure 5. Snowshoe hare indices based on 1) hares seen on grouse drumming routes in spring (1974-2003) and 2) hare tracks observed on winter furbearer surveys (1991-2002).