

MINNESOTA GROUSE AND HARES, 2002

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RUFFED GROUSE. Minnesota's 53rd annual ruffed grouse drumming survey was conducted during spring, 2002. A total of 133 routes were completed, tying the record set in 1998. In addition to the Division of Wildlife, 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, Leech Lake, Red Lake, Mille Lacs, and White Earth Indian Reservations, and numerous private individuals. Overall listening conditions were reported as excellent, good, and fair on 56%, 32%, and 12% of the routes, respectively.

As expected, drumming indices appear to be at or approaching the cyclic low. Compared to 2001, drumming remained stable in the Southeast (0.4 drums/stop) and Northeast (0.6 d/s) (Fig. 1). The North-Central (-9%), Northwest (-8%), and Central Hardwoods (-14%) regions exhibited small declines, with drumming rates of 1.0, 1.2, and 0.6 drums per stop, respectively. Statewide, drums declined 11% to 0.8 drums per stop (Fig. 1), similar to lows observed in previous cycles. If pattern holds, we should expect to see a "rebound" in the cycle in the next 2-3 years.

SHARP-TAILED GROUSE. Male sharptails were counted on leks during spring 2002 by the DNR Wildlife Division, Rice Lake and Agassiz Refuges, and numerous volunteers. Statewide, a 12% decline was observed in the total number of males counted on 270 comparable (i.e., counted in both 2001 and 2002) leks. The decline appears to be a combined result of a drop in the average number of males per occupied lek (7.5; down 6% compared to 2001) and a decline in the proportion of occupied leks (53%; down 5% compared to 2001).

In the East-Central Range, total numbers of males on comparable leks declined 10%. Occupied leks averaged 6.6 males (Fig. 2), down 4% from last year, with 56% of the 168 surveyed leks being occupied (down 5% from 2001). Results for the Northwest Range were approximately similar, with total number of males on comparable leks declining 13%. Occupied leks averaged 8.7 males (Fig. 2), down 7% from 2001, with 49% of the 140 surveyed leks being occupied (down 8% from 2001). Comparison of sharptail and ruffed grouse indices over the past 16 years suggests that current declines may be partly a result of cyclic patterns similarly observed in ruffed grouse (Fig. 2). Hence, changes in sharptail numbers may reflect both a longer-term decline resulting from changes in habitat quality and periodic declines associated with population cycles.

SNOWSHOE HARES. A total of 15 hares were observed on grouse drumming routes this spring. The 2002 spring hare index of 0.75 hares seen per 100 km is a 55% decline from 2001. A separate index computed from the 2001-02 mid-winter track survey indicates no change from last winter's record high (since the survey started in 1991) (Fig. 3). Although recent cycle peaks appear minor in comparison to the estimated peak from the late 70's, patterns indicate we may be near a cyclic peak (Fig. 3). Numerous field observations suggest that, in spite of the decline in spring indices, hares may still be reasonably abundant, at least in localized areas. Nevertheless, if cyclic patterns continue, we will likely see a downturn in hare numbers before long-- only time will tell.

FOREST GEESE. Beginning in 1996, drumming survey cooperators have been asked to record the presence of Canada geese at each stop. In 2002, geese were seen or heard on 63% of the routes, a decline of 25% from 2001 (Fig. 4). The proportion of routes with geese varied from 17% in the Northeast, to 95% in the Northwest drumming zone. The average number of stops per route with geese observed/heard was 2.8, a 32% decline from 2001 (Fig. 4).

Sincere thanks if you participated in these spring surveys.

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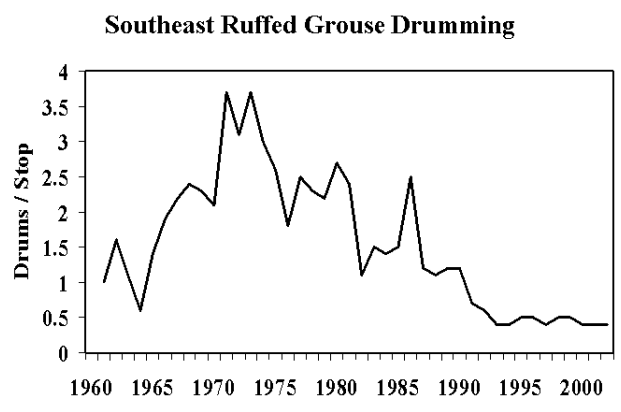
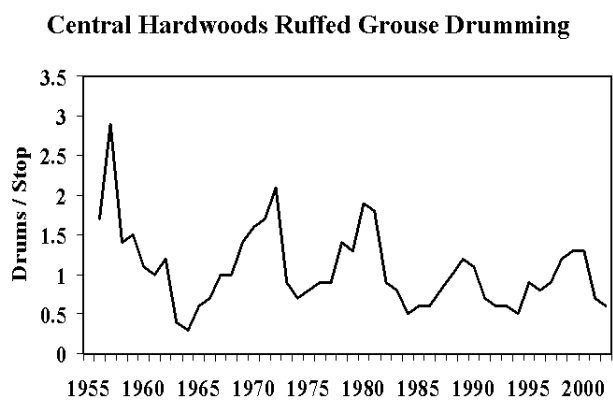
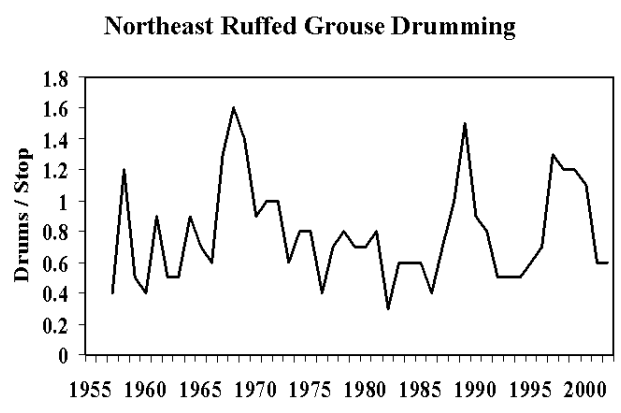
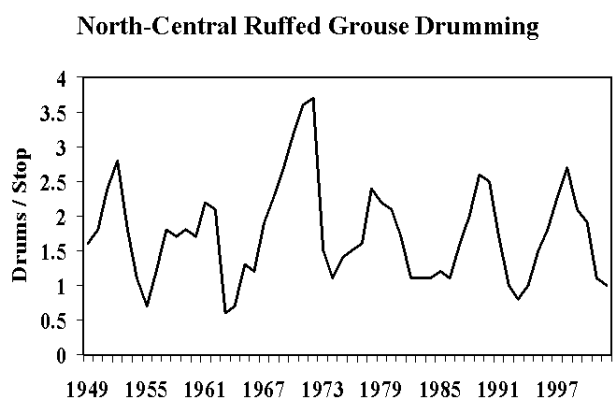
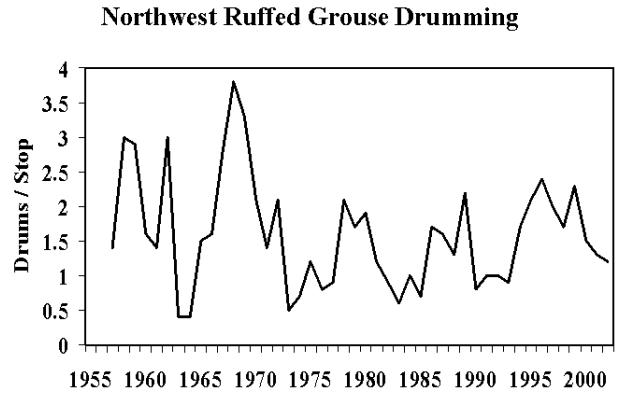
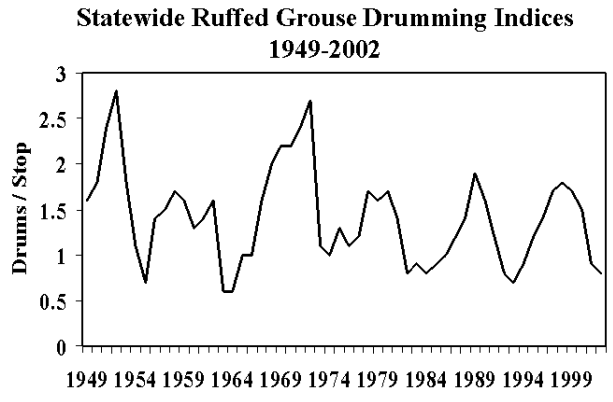
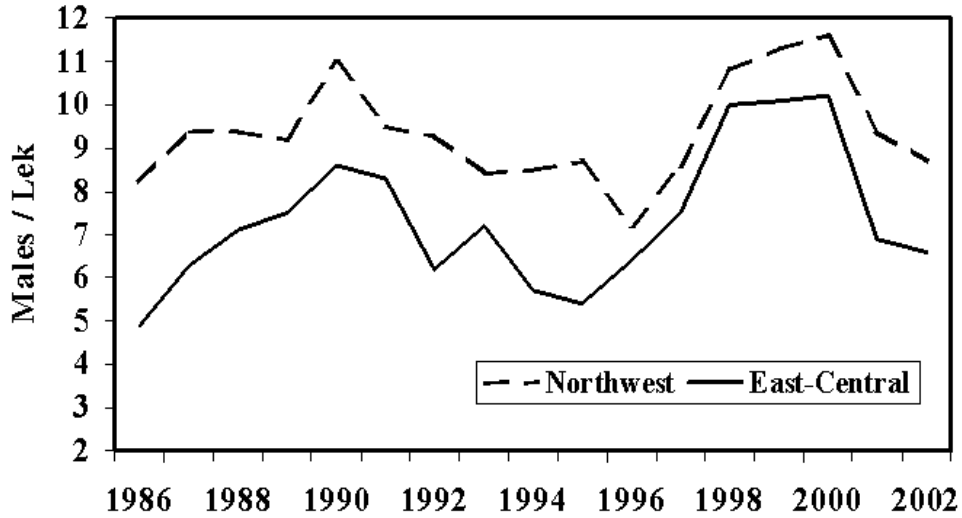


Figure 1. Minnesota's statewide and regional ruffed grouse drumming indices, 1949-2002.

Sharptail Males Per Lek, 1986-2002



Sharptail and Ruffed Grouse Indices, 1986-2002

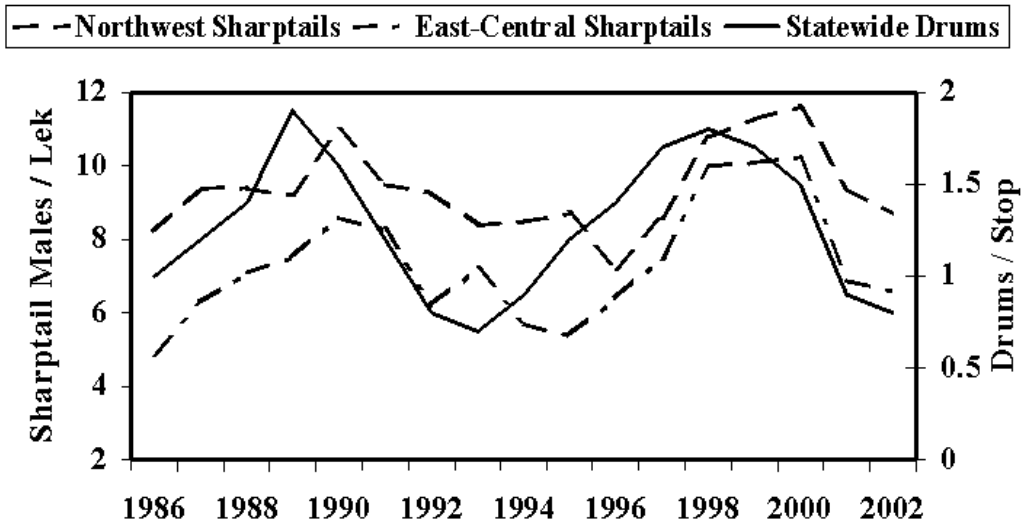


Figure 2. Minnesota's sharp-tailed grouse population indices, 1986-2002, and comparison of recent trends in sharp-tailed and ruffed grouse indices.

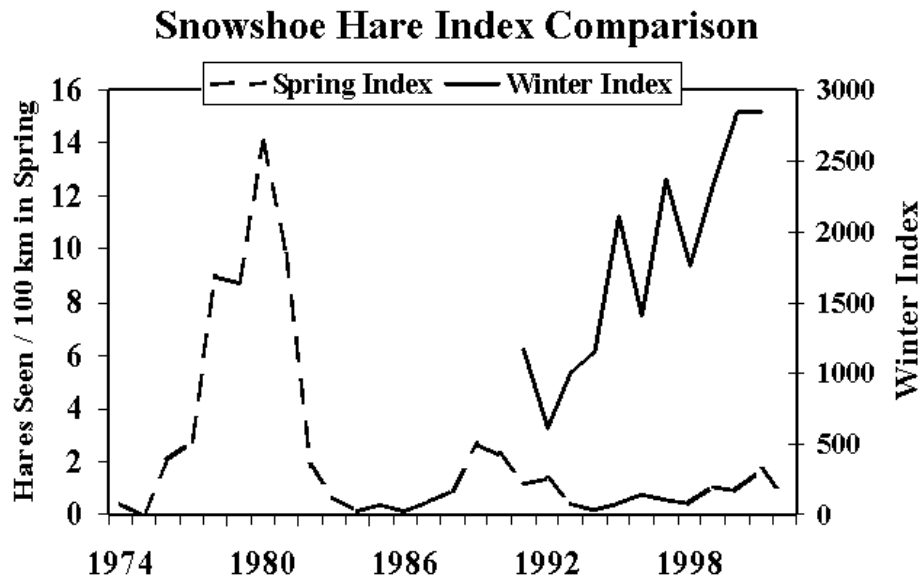


Figure 3. Snowshoe hare indices based on 1) hares seen on grouse drumming routes in spring and 2) hare tracks observed on winter furbearer surveys.

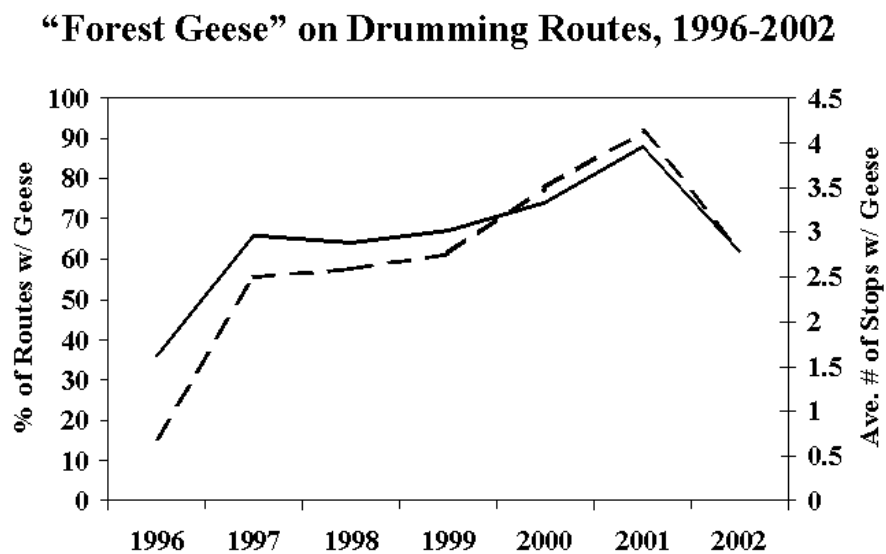


Figure 4. Percent of ruffed grouse drumming survey routes on which Canada geese were seen or heard, and average number of stops per route that geese were detected.