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ALASKA'S DEER HAVE THEIR UPS AND DOWNS

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The Sitka black-tailed deer is probably the most popular big game animal wherever it is found in Alaska. It originally inhabited only the islands and mainland of Southeastern Alaska, but its range was extended by transplants in the 1920s and now good populations also occur in the Prince William Sound and the Kodiak Island areas. In addition to providing some of the finest recreational hunting in Alaska, deer are also an important source of meat, especially for residents of smaller communities.

About 5,000 to 7,000 Alaskans hunt deer each year. Seasons and bag limits are liberal (most areas have a five-month season with a bag limit of four deer of either sex), and annually about 80 per cent of Alaska's deer hunters are successful in taking at least one. Most hunting is concentrated near major towns, with remote areas receiving little or no hunting pressure.

Alaska is the northern fringe of the deer range in North America and our deer populations are probably more sensitive to environmental changes than those in more southerly areas. History shows many alternating periods of highs and lows in deer numbers, but we always seem to remember the peaks and tend to forget there have also been times when deer were scarce.

In recent years, deer attained a high of abundance in about 1963. After this peak, deer populations declined steadily and reached a low point in the spring of 1969. Many people look for quick, easy answers to explain game population fluctuations, and periods of low abundance are usually attributed to either excessive hunting or predation by wolves. The search for a simple solution often leads to unnecessary manipulation of seasons and bag limits which deprive the sportsman of hunting opportunity. Actually, there are few, if any, areas in Alaska where hunting pressure has a significant impact on deer populations. Where wolves are present, demands are made for control programs which are usually costly, ineffective and unnecessary. Deer and wolves have co-existed in many areas for thousands of years and there have been high deer populations in these areas as well as in those where no wolves are found.

A review of past reports indicates that deer lows have previously occurred in 1918, 1925, 1934, 1943, 1950, 1956 and 1969. These periods of low deer abundance occurred in areas which received almost no hunting pressure as well as those which did not support wolf populations. Deer have always increased after each low in spite of both hunting and predation.

In Alaska, we believe the primary factor limiting deer abundance is winter weather. An analysis of weather records since 1915 shows periods of low deer abundance usually are preceded by a series of severe winters and periods of high abundance are preceded by mild winters. In the most recent cycle, the winters of 1957 through 1963 (with the exception of 1961) were mild, and deer increased to a peak in 1963. From 1964 through 1968, winters were colder and deer populations declined. The winter of 1968-69 was one of the most severe on record. Deer losses were correspondingly high and in the fall of 1969 hunters experienced one of the poorest hunting seasons in recent years.

Low temperatures alone do not kill deer; but snow accumulation, which usually accompanies cold weather, covers available food and deer starve. Surviving does are in poor condition and produce fewer fawns, and fawn survival is less than in springs following less rigorous winters.

Deer utilize two major types of food during winter months: browse (woody shrubs) and forbs (succulent ground plants). Browse species are of low nutrient quality and will not maintain deer for extended periods. Forb species are more nutritious, but a few inches of snow will cover them. Deer will gradually starve during long, cold winters when restricted to a browse diet, but can survive short periods of relatively deep snow if periodic thaws make ground forbs available.

Mild winter conditions, which coincide with rising deer populations, have an adverse effect on wolf populations in Southeast Alaska. Deer are in good condition and difficult for wolves to obtain. Stomach samples from bountied wolves show a higher percentage of miscellaneous food items during mild winters. Wolves travel further and work harder to obtain food and there is some indication that strife occurs between groups and perhaps even within family units. This in turn apparently influences breeding activity and fewer pups are produced.

Presently deer are increasing in most areas of Alaska. The winter of 1969-70 was very mild, resulting in good deer survival and excellent fawn production during the spring of 1970. The resultant increase in deer numbers is most noticable on the northern islands of Southeast Alaska where predation is not a factor, but deer populations on the southern islands have also increased markedly. Some of the best deer areas in Southeastern are those which also support wolf populations.

Deer recover rapidly from lows, sometimes requiring only four to five years to increase from a low to a high level of abundance. This has happened many times in the past and can be expected to occur again. Food availability and quality, productivity, hunting and predation may influence trends, but winter weather appears to be the major controlling factor on deer abundance in Alaska. ■

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