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FACTSHEET

ELK

"The farmers and frontiersmen (of Stevens County) complain that elk are destroying their crops. These grievances are mostly an excuse to kill for personal use."

So reported Harry Rief, Deputy State Game Warden in 1931, when commissioned by the State Supervisor of Game and Game Fish, Samuel F. Rathbun, to make a study of the status of elk in Washington.

At that time, Rief estimated the total statewide elk population to be 10,000 animals.

Since the time of Rief's early elk status report, elk in Washington have been the subject of speculation, management theories, and further reports.

Three years after Rief's study, in the first biennial report of the Washington State Game Department, it was stated that on the Olympic Peninsula a four-day season was inaugurated, resulting in the killing of 157 elk out of an estimated herd of 6,000. "The elk season on the Olympic Peninsula had been closed for many years, during which poaching and unlawful shooting had become rampant. It was open talk that poachers were selling elk meat to regular customers and had been for years. We are sage in state that the number of elk lawfully shot is infinitely smaller than the number unlawfully killed in prior years."

According to a 1939 report of the State Game Department, elk were native to western Washington, but no records were available to determine whether or not elk were found in the eastern part of the state during early settlement. Biologists making the study reported that elk were seen by early explorers, chiefly in the lowland river bottoms and prairies of western Washington. It was felt that cougar were the principal factor limiting the elk population at that period. "As settlers cultivated the lowlands, elk were forced to the hills, and, as predatory cougar were reduced in number, their place was supplanted in some districts by white men and Indians, who often were more destructive than the predators they replaced. However, until the introduction of firearms by the white man, few elk were killed by Indians, because they were difficult to bag with the Indians' primitive weapons."

KING OF THE FORESTS —

The Wapiti, or elk, is the second largest member of the deer family found in the United States, with the moose ranking first in this respect. Native to this country, the elk were found in early pioneer days throughout most of the United States, excepting only the areas along the Atlantic seaboard, the Gulf States and Nevada. A geographical gap existed between the western parts of Washington, Oregon and California, in which the Roosevelt elk were indigenous, and the Rocky Mountain areas of Idaho, Utah, Colorado and Arizona, which were the native habitat of the Rocky Mountain species.

At the beginning of the twentieth century, the elk had disappeared from the eastern and the Great Plains states, retreating to their current ranges in the Rocky Mountain states to the westward.

The earliest recorded use of the term "elk" to describe the species, according to Ernest Thompson Seton, was in 1605, when the animals found in Virginia were referred to as "Olkies", a term commonly pronounced as "elk". "Wapiti", long used to describe the European and Asiatic species of stag, or large deer, was also, according to Seton, used by the Shawnee Indians, although in general practice today it appears to be a term used mainly when referring to this animal on an international aspect.

Of the six species of elk recognized in the United States, two are found in the State of Washington. The Roosevelt elk, from earliest recorded time, have roamed the mountainous areas of the Olympic Peninsula, while the Rocky Mountain, or Yellowstone elk as they ar sometimes called, are an introduced species, although some records note that some of those animals were found in the Okanogan and Blue Mountains areas as early as the latter part of the nineteenth century.

In 1912, 186 elk were imported from Montana and released in Washington, all of which apparently were killed by poachers and predators, except the 80 animals released near Enumclaw, some of which survived and became the nucleus of the presently existing herd in that area. In 1913, 121 more elk were brought to Washington from Montana. Fifty of these were released in the Naches River area of Yakima County, resulting in the Yakima-Kittitas herd of some 15,000 animals today. In Garfield and Walla Walla Counties, 65 more elk were set free, to become the popular Blue Mountain herd of current times. At various other times since that date, additional elk have been either imported or transplant within the state, so that today they ar found in numbers more than 60,000 throug out the western south central and southeastern part of the state.

The Rocky Mountain elk, in general, are slightly lighter colored than the Roosevelt elk of the western counties, but similar in size. Some persons claim the Roosevelt elk to be the larger of the two, and this has been substantiated to be a 5 percent difference. Body colorations of the elk vary slightly between winter and summer. The fall coat, as usually observed by hunters, is a brown color, varying from grayish on the sides to very dark--sometimes, almost black--on the neck and legs. On the lower parts of the body and upper portions of the legs, a rich shade of brown prevails, most pronounced in old bulls. The elk's most distinctive color feature is the rump patch, which is usually tawny, varying to a pale whitish or cream color. Beneath the chin and extending down the throat is the mane, consisting of long dark hairs, consistently characteristic of the elk, even in first-year calves.

Adult bull elk in their prime have been weighed as high as 1,100 pounds, but Seton gives an average weight of 700 pound for a prime adult bull. Around 500 pounds live weight appears to be an average for adult mature females, while newborn elk calves weigh between 30 and 40 pounds. Range and habitat conditions will cause considerable variance in weights, and all such figures fluctuate considerable.

As with all members of the deer family except the reindeer, the cow elk has no antlers. Normally, the antler growth on bull elk begins late in May, when the young animal is about one year old. The growth is extremely rapid, beginning with bulbous projections which in a few days become the foundations of the brow tines, to be followed shortly thereafter with second protuberances which eventually become the 'bez' tines, traditionally named during European medieval times. Following this stage, the growth, now nearly a foot high, proceeds with amazing speed to produce the remaining structure of the antlers, which generally, until August are covered with a velvety protection of the sensitive blood vessels which feed the growing antlers. As full growth is attained, this blood supply is gradually reduced, the parts become less sensitive and the outer covering begins to peel off, often hanging in long shreds. At this stage, the bulls assist the peeling process by rubbing the antlers against trees and brushwood, until the newly-grown antlers are completely dried and hard, and the tines become almost needle sharp at points. On younger animals, the antler growth is usually slower than on mature elk, and young bulls are often found in the fall with their spikes still in "velvet."

Carried throughtout the winter season, the antlers, as a rule, are shed by the middle of March, to be followed by the growth cycle again. The dropped anglers, although bone-hard, are generally soon consumed by mice, rats, squirrels and porcupines, and for this reason, do not last long once they are on the ground.

Undisturbed elk, feeding in their native habitat are noisy animals by wildlife standards. They have been described as "squealing, barking, roaring and bugling," together with many other various vocal outbursts. Cows and calves appear to communicate with a bleating sound and, when alarmed, often emit a high-pitched squeal. Adult elk, when excited or startled, may voice an explosive grunt similar to a hoarse bark. Both cows and bulls are known to "bugle," but the bugle of an adult bull elk is far more distinctive, being a shrill, high-pitched whistle, clear and far-carrying in its intensity. The bugle of the cow is described by Murie in "The Elk of North America," as "a combination of squeal and groan, difficult to describe," which occassionally dropped to a series of low, short whines.

A cow elk, normally, breeds for the first time at about two and one-half years of age, while the bull elk becomes sexually mature somewhat younger, often at about two years. The rutting season begins after the velvet has been shed from the antlers in early fall, and usually continues around mid-October. During this time the bull is pugnacious in nature, and often battles with other bulls for control of a "harem" of cows over which he has assumed proprietary interests. In splendid physical condition

at this time, such battles sometimes end with death of one of the participants and, on rare occasion, to both, especially if, in their headlong attack, the huge antlers become interlocked, leaving both animals incapable of feeding and eventually starving to death.

Elk calves are generally born in late spring, at about the same time the first sysptons of antler growth are apparent in the bulls. A single calf is the general rule of reproduction, although twins are estimated to occur about once in three hundred births. Young calves instinctively drop to the ground and lie motionless when frightened, thus often escaping detection, but after becoming about a week old, they are more likely to flee when approached. It is believed that most elk calves begin to feed on browse when less than one month old, but suckling continues at the same time throughout the summer months. Murie notes that a young spike bull, with velvet spikes about two inches long, was observed down on its knees suckling a cow, presumably its mother, while the cow submitted amicably.

Elk, as in the case of many other animals, are subject to various diseases, including arthritis, pneumonia and necrotic stomatitis, with the latter by far the most important, being basically the result of vitamin deficiency often caused by malnutrition or improper food consumption, especially unnatural foods. In such cases, the animals become unkept, with various manifestations, such as sores, ulcers, emanciation and general weakness, following which the animal lies down and is unable to arise, with death usually resulting within twenty-four hours after this stage has been reached.

In general, grasses and sedges form the principal diet of wild elk, although this depends considerable on the flora of the habitat area in which they live. On ranges which are overgrazed, elk will utilize browse to a large extent and include in their diet such shrubs and trees as fir, maple, serviceberry, dogwood, apsen, pine, willow and many other species, including at least two kinds of sage.

Natural enemies of elk in Washington include the cougar, coyote, dogs and, to some extent, the bobcat, bear and golden eagle, although the latter three are more prone to attack and consume young calves or severely injure animals. While even a newborn calf is too heavy for an eagle to carry away, these birds have been noted to strike an elk calf a swooping blow, thus maiming or killing it, and later consuming it.

The elk herds of Washington are now largely restricted to seven major areas of the state. The two major herds are Yakima 20% (12,000), and Olympic 25% (15,000), or 45% of the population between them. Willapa (9,000), Blue Mountain (7,000), Wenatchee Mountains (5,800) and Saint Helens supply another 48% (7,000) and the balance of 7% is contained in the herds of Mt. Rainier (3,500), Nooksack (500), and Pend Oreille (200).

Game biologists estimate that Washington elk ranges will support between fifty-five and sixty thousand animals, although in some parts of the state range conditions are far more satisfactory at this time. Based upon a total population approaching 65,000 elk, an annual harvest of between 10,000 and 15,000 is anticipated to continue.

The basic objectives of Washington's elk management program have always been to produce and harvest the maximum amount of elk possible within established range without damage to the basic range resource, and at the same time furnish as much recreational opportunity as possible.

In the history of elk management in Washington, hunting was limited until the early 1940's, when the number of hunters jumped from less than 8,000 to more than 20,000. That some elk existed in the state around the beginning of the twentieth century is evidence by old game regulations which authorized the taking of two elk during open seasons in 1897 to 1900, when the limit was reduced to one male elk. In 1905, by legislative act, all elk hunting in Washington was prohibited until 1915, which was later extended to 1925. In 1927, one elk was legal game in counties east of the Cascades only, and in 1935,

878 hunters took 250 bull elk for their season's kill. In the following years, there was a gradual increase in the number of hunters, seasons were restrictive and the harvest stable. By 1949 damage problems were prevalent in almost every elk area in the state. To solve these problems, very liberal seasons were established for the next three years. During this period, 212 antlerless animals were taken for each 100 bulls harvested. This resulted in a substantial reduction and in 1953, a restrictive pattern was again adopted. This permitted the elk herds to start building and there has been a farily steady increase in the population since that time. Hunting has also increased steadily since 1954.

After the liberal seasons between 1949 and 1951 a program was adopted for taking of antlerless elk in most areas of the state controlled by permit.

For many years the elk season was limited to one week and two weekends, for a total of nine days. With the tremendous increase in the number of hunters that has occurred in recent years, hunting areas were becoming extremely congested during this short season. Because of restricted range, elk hunting trends to be more crowded than does deer hunting. In addition, competition in elk hunting is extreme, with only 10 to 15% of the hunters in the state successful each year.

In an attempt to spread the hunting pressure out over a longer period, in 1966 the season in eastern Washington was extended to two weeks, including three weekends. The longer season pattern was extended to the rest of the state in 1967.

By the spring of 1967, it had become obvious that some decisions would have to be made concerning the elk management program. Elk herds had built up in many parts of the state to the point where they were expanding into new areas. Some of the land use patterns were such that the elk had the potential of creating serious damage problems.

Along with the 1967 hunting season, a system of either-sex hunts was established around the major elk areas to prevent spread of elk into ranges that could cause damage problems, or were better suited for production of other wildlife.

Elk populations in Washington have been enhanced through the years by innovative management practices. Washington's record elk harvest took place in 1966, when 80,200 hunters bagged a total of 13,760 elk, of which 8,040 were antlered bulls and the remainder cows and calves. During the 1976 season, a total of 100,730 hunters harvested 10,030 elk. Statewide pre-harvest populations today are approximately 65,000 animals.

The future of Washington's elk depends entirely upon the sound game management policies. With civilization's borders constantly encroaching upon the wilderness areas which form the natural elk habitat of the state, adequate ranges must be maintained for their survival, together with balanced harvests in proportion to our elk population. Purchases of Wildlife Recreation Areas, and artificial feeding programs on Department lands have been beneficial to elk populations, particularly in the Yakima area where winter range is lacking.

In addition to such programs, hunter success and opinion surveys have been conducted throughout the years. From Farry Rief's early elk status report to the Monday elk opener opinion survey, the Game Department has endeavored to manage and enhance Washington's elk for the benefit of all.

The Wapiti, increasingly becoming a coveted prize among big game hunters, is a definite wildlife asset to out state, and under proper management will continue to thrive and vie with the mountain goat and deer for popularity, not only among sportsmen, but also among those who enjoy the aesthetic values of this noble animal.

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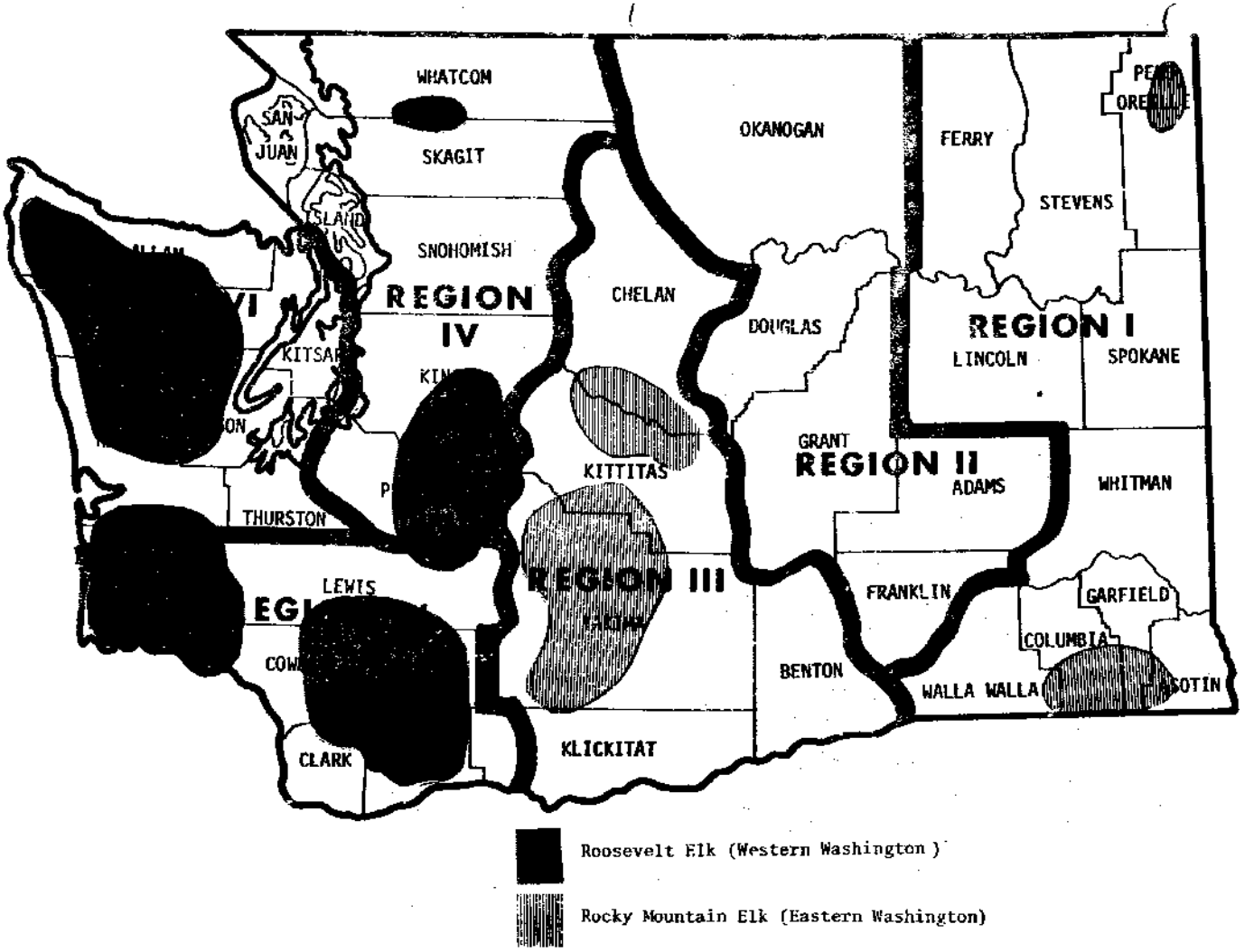
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