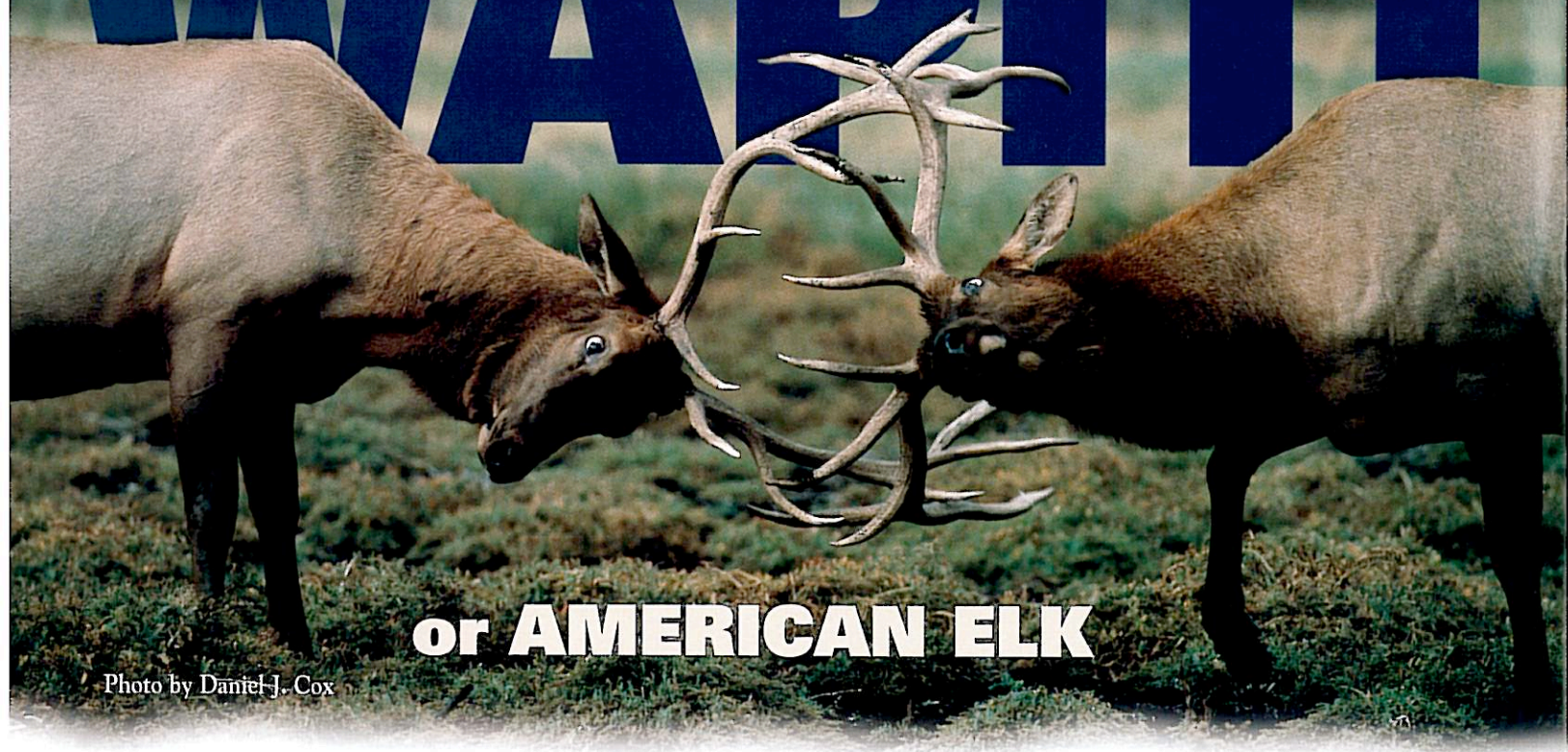


W W A R P I T I

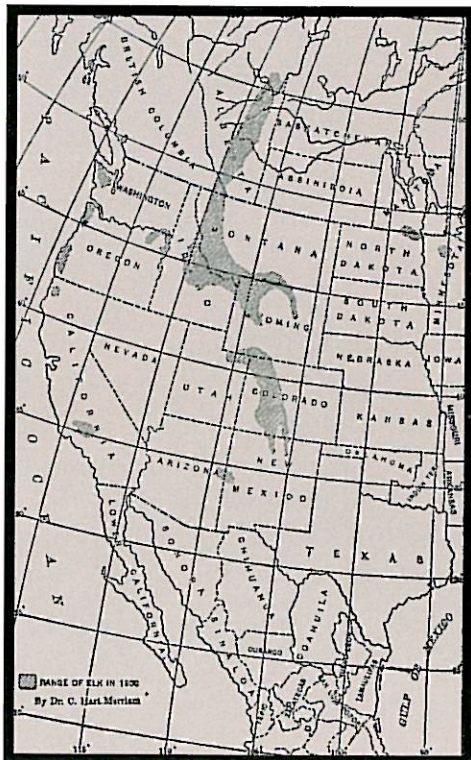


or AMERICAN ELK

Photo by Dantel J. Cox

By PHILIP L. WRIGHT, PH.D.
Honorary Life Member
BOONE & CROCKETT CLUB

THE DISTRIBUTION OF ELK HAS CHANGED DRAMATICALLY SINCE THIS MAP WAS PRINTED IN 1903.



This majestic animal which Teddy Roosevelt regarded as the "stateliest deer in the world" formerly had very wide range extending into the Adirondacks of New York and down into Virginia and the Carolinas and from there continuously westward over most of the western third of the country. It was eliminated a hundred years ago in these eastern and mid-western states, and seriously reduced in the west, but fortunately survived in Yellowstone Park and other remote, wilderness areas in Wyoming, Montana and Colorado. It survived on the plains of Canada in the Riding Mountain area in Manitoba and has thrived there since the area was designated a National Park in 1930. Its continent wide distribution as known in 1900 is shown on the accompanying map taken from Teddy Roosevelt's chapter on elk in

his 1903 book, *The Deer Family*. Since that time it has been uphill for the elk with many transplants to ancestral ranges from Yellowstone Park, combined with excellent management of the growing populations by game departments. Elk numbers now estimated by the Rocky Mountain Elk Foundation at over 950,000 occur in 23 states and six Canadian provinces. The tremendous success of the Rocky Mountain Elk Foundation in attracting upwards of 95,000 members all wanting to contribute to projects furthering the well-being of this animal shows the great appeal the elk has to hunters throughout the continent.

During the Glacial Period a succession of land bridges allowed mammals to range freely back and forth from Asia into western North America. The retreat of the last glaciers cut off the bridge about 10,000 years ago and the elk of eastern Asia is now almost identical with our American animal. In America, the early mammalian taxonomists described six different elk. First as species and then reducing these to subspecies of one species. As Val Geist, the Alberta big game biologist, has pointed out, the subspecies of American elk differ structurally from each other only slightly and he feels that the Eastern, Arizona, Manitoba, and Yellowstone forms should no longer be regarded as distinct entities. There are

also reasons to doubt the validity of the Roosevelt's or Olympic form of the northwestern states or the Tule elk of California. For our purposes the former differs in antler form and the latter in smaller size. In Asia and Europe distinctly differing varieties occur all the way west to Scotland that should be identified with subspecies names.

Big game biologists have spent tremendous effort for many years to learn about all aspects of the species. Two major books have been written, the first by Olaus Murie in 1951 and the more recent one edited by Jack Ward Thomas, now chief of the U. S. Forest Service, and Dale E. Towiell in 1982. The numbers of comprehensive scientific studies published in the formal literature is voluminous and now ranges to well over 100. The serious student of elk biology should study the latter book in particular to become fully oriented about elk management. I can comment only about a few aspects of the animal's life history.

The elk is about four or five times the size of a whitetail or mule deer. Typically full adult bulls weigh in excess of 800 pounds and cows above 500 pounds. Bull elk are not fully grown until over 5 years and cows at about 3 years of age. The slower maturity is to be expected for such a large mammal. The gestation period is over 240 days compared to a deer's 200 days. In the Northern Rockies,

the normal time of birth is close to the first of June. Calves born before that time may encounter severe spring storms and those born in July or later may not be mature enough to survive the first winter.

The striking and spectacular breeding behavior with the bone-chilling bugling and fighting amongst mature bulls in September results in harems of breeding age cows defended by the most vigorous bulls. Adult bulls commonly use a wallow (bottom right) which they frequent during the rut. These wallows are muddy and smelly from elk urine. They also produce louder and more varied guttural sounds than younger bulls. The whole breeding activity has been much studied by biologists. Cows have a receptive period lasting less than 24 hours and if they are not successfully bred at that time will not come into heat until about 20 days later.

Although most rifle seasons in the western states are conducted after the breeding season is largely over, archers hunt during the rut and their effect on the success of breeding activities is debatable. Intense hunting pressure by both archers and rifle hunters in most areas results in reduction of mature bulls so that in some herds there may be only young bulls to breed the cows. In a recent experimental study in Oregon, the Starkey Project, the ages of breeding bulls was controlled. When only yearling bulls were available for breeding the peak of breeding was October 21. When only 5 year-old bulls were the breeders, the peak of breeding was September 28. Thus when there were only young bulls, yearlings or spikes, the cows were mostly bred during their second heat period. Clearly the late breeding season is undesirable in terms of winter survival of the calves. The problem of maintaining adequate numbers of older bulls is one of many problems facing elk managers today. Management programs that are planned to produce more animals for the table are in conflict with those designed to provide big mature trophy bulls. This is compounded by the fact that bull elk must be 6 or more years old to produce record size antlers. There may be no bulls of that age in many of our hunted populations today.

Elk can be quite accurately aged from inspection of their teeth. Teeth of only five record book animals were available in the Club office for sectioning. They were 7, 9, 10, 11, and 13 years old. This doesn't tell us much about the mini-

MINIMUM SCORE

	Awards	All-Time
Typical	360	375
Nontypical	385	385

mum age of trophy sized bulls, but it does clearly show the older age structure than in whitetails or mule deer bucks that aren't commonly as old as 10 years. Elk of both sexes have upper canine teeth, often called ivories, that are rounded and smooth since they are not opposed to any lower teeth. They are highly prized by hunters. The males have bigger teeth and are more varied in color than the cow's canines. They undergo changes with age but cannot be used to determine the precise age.

Black bears are known to be significant predators on new-born elk calves in Idaho. Cougars and wolves successfully prey on elk of both sexes and all ages throughout the year. At the close of a long hard winter when some elk may be in poor condition and close to starvation, coyotes prey effectively on these weakened animals.

Elk require large expanses of relatively undisturbed habitat. Some populations are highly migratory while others move only from higher to lower elevations as snow depths increase. Several recent studies show that elk are most secure in unroaded areas and a widespread effort to close forest service roads to motorized vehicles has been in effect in the Northern Rockies.

The Club's program of records keeping of elk trophies should be briefly reviewed. The system of measuring elk since 1949, favors the mature elk with six or seven symmetrical points all coming off the main beam individually. Roosevelt's elk, occurring only in western California, Oregon, Washington and Vancouver Island, British Columbia, was known to produce shorter, thicker antlers, often with additional crown points toward the antler tips. Glenn St. Charles, the founder of the Pope and Young Club, recognized that these trophies never made their way into our record books, in part because the crown points were penalized by our scoring system. He almost single-handedly waged a campaign to establish a new category for these unique animals. Finally in 1980, the Records Committee established a class for these animals which credits the top crown points even though they may be unsymmetrical. Entries were received starting with the 18th Awards Entry Period. Currently there are over 125 such

trophies entered in our program with several monstrous trophies topping the list. Roosevelt's elk must be taken in western Oregon or Washington, extreme northwestern California, or Afognak Island Alaska, where they have been established by transplants. Although these elk on Afognak Island thrive and reach very large body size, their antlers are small and none have been entered into our program.

In 1984 the Club also established a non-typical class for American elk to correspond to our non-typical classes for whitetails, Coues', and mule deer, which had been in existence since 1950. The scoring system allows non-typical points to be added to the score rather than subtracted. Over 20 eligible trophies taken in prior years became eligible for entry, all of which had been penalized by non-typical points. They came from all over the American elk range from Arizona and New Mexico to Manitoba. The current World's Record came from that province. The 22nd Awards Period had six big non-typical trophies all taken during the past three years and all scoring over 400 points. The current list has some 64 non-typical elk trophies listed.

TOP THREE AMERICAN ELK-TYPICAL

442-3/8
ED ROZMAN
Dark Canyon, Colorado
1899

441-6/8
JACKSON HOLE MUSEUM
Big Horn Mtns., Wyoming
1890

421-4/8
JAMES C. LITTLETON
Gila County, Arizona
1895

AMERICAN ELK NONTYPICAL

447-1/8
JAMES R. BERRY
Gilbert Plains, Manitoba
1961

445-5/8
JERRY J. DAVIS
Apache County, Arizona
1984

423-4/8
LEE F. TRACY
Granite County, Montana
1971

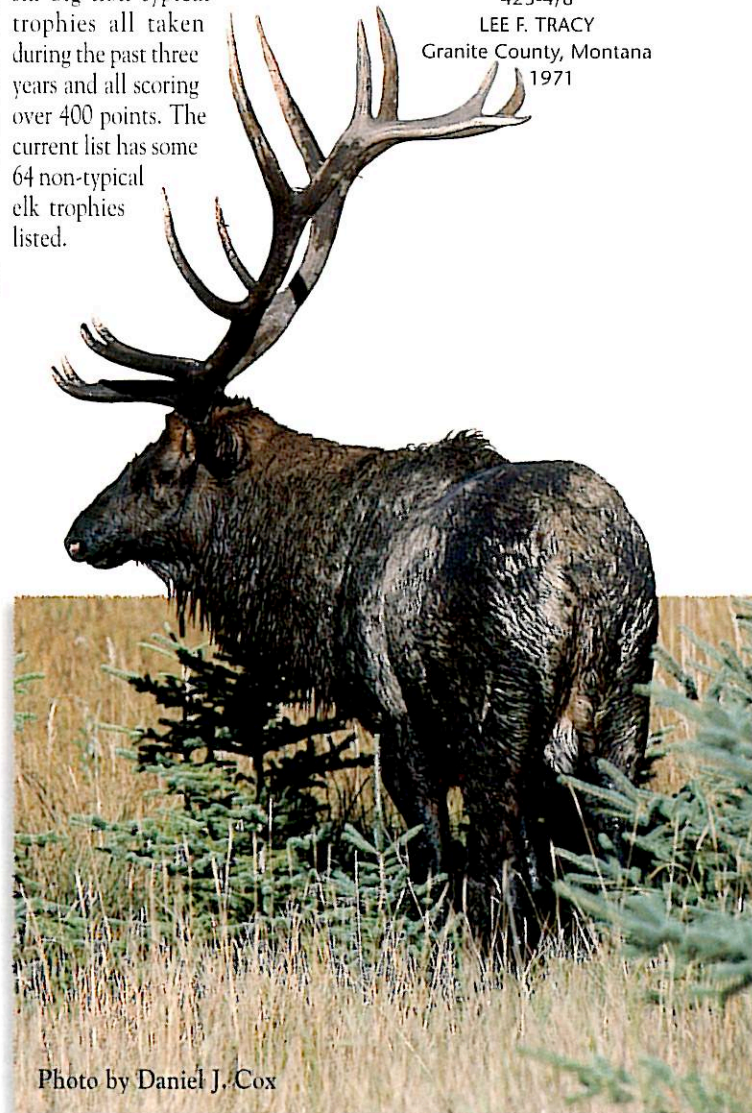


Photo by Daniel J. Cox