MUSEUM NEWS

W. H. OVER MUSEUM, STATE UNIVERSITY OF SOUTH DAKOTA, VERMILLION, S. D.

VOLUME 22, No. 9

September, 1961

THE RING-NECKED PHEASANT IN SOUTH DAKOTA

by

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As the name indicates, the Chinese ring-necked pheasant is a native of China, but the first pheasants introduced into the United States are said to have been imported from England by George Washington, who secured several pairs for his Mount Vernon estate in 1789. Governor Wentworth of New Hampshire imported several ring-necks the following year, but it was not until 1880 that they received their start as a game bird. In that year Judge O. N. Denny, U. S. Consul General at Shanghai, shipped the birds direct from China to Oregon, where they were liberated on the Willamette River. This was probably the beginning of the Oregon pheasants, for in 1892 Oregon had a 10 weeks open season with an estimated kill of 50,000 birds. Since then pheasants have been introduced into nearly every State in the Union, but they appear to thrive best above the Mason-Dixon line. Research has shown that States along and above the 40th parallel have achieved the greatest success with the ring-necked pheasant.

Credit for the earliest attempts to propagate the ringneck in South Dakota is quite generally given to Dr. A. Zitlitz, a former resident of Sioux Falls, but the following news item appeared in the Sturgis Weekly Record on July 10, 1891: "About the first of the month N. L. Witcher will receive an invoice of Chinese pheasants from Oregon. He will turn them loose at various places on Bear Butte Creek [Meade County] and asks as a particular favor that all sport loving men leave them alone. Do not shoot them or harm them under any circumstances. These birds are said to be both prolific and hardy, and with a little protection for a few years will drive out the vulgar native grouse, which are not really game birds, but a near relative to the fly up the creek." However, a search of the files of the Sturgis paper failed to unearth any further mention of the introduction of pheasants.

Dr. Zitlitz is said to have brought two male and four female ringnecks, as well as a few of the golden and silver varieties, to Sioux Falls from Illinois in 1898. These birds were kept in pens at his home. He was successful in raising about two dozen young the first year and 10 of them were liberated at the junction of the Split Rock and Sioux Rivers in Minnehaha County. By watching these birds, Dr. Zitlitz discovered that they did not stay where they were liberated, for they were seen at various times in adjacent territory. Birds were seen in the Sioux Falls

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locality for some years, and in 1902 several were discovered near Yankton. apparently prospered while left alone but it is believed that unethical hunters cleaned them out. In 1903 Dr. Zitlitz again released a number of pheasants in Split Rock Township and this flock was often seen between East Sioux Falls and Brandon.

The next attempts to introduce this game bird into South Dakota were also made by private individuals. A. R. Cooper and E. L. Ebbert, operators of adjoining farms south of Doland in Spink County, purchased several pairs from a Pennsylvania game farm in 1908 and released them in wooded sections of their farms. These birds apparently failed to survive the heavy snows of that winter. The following year 1909 the two men tried again, releasing a few dozen young birds, which evidently survived. Many were killed by hunters but some of these are believed to be the progenitors of much of the pheasant population in that vicinity today.

Three Redfield men also undertook to introduce the ring-necked pheasant the same year. H. P. Packard, H. J. Schalke, and H. A. Hagman purchased birds which were eventually released on Hagman's farm north of Redfield, adjacent to the James River. These pheasants survived and were seen the following year along the river. A. C. Johnson of Frankfort also purchased 25 birds the same year and released them on his

The first large planting of pheasants in this vicinity was made by the Redfield Chamber of Commerce, and was in all probability a result of the success previously attained by individuals. In 1911 the State Game Department purchased 48 pairs of birds with privately subscribed funds and released them near Redfield. The following year State Game Warden, W. F. Bancroft, purchased 200 pairs of pheasants for the State through the F. L. Bramble Aviary at Watertown. The Game Department exhibited the birds at the State Fair, then issued three hens and a cock each to reliable farmers living along the James River in Spink and Beadle Counties, where cover and water were

The pheasant program was pushed in earnest in 1914-15 by the purchase and release by the State of a total of 4,000 birds. The next three years brought the total up to 7,000 birds, nearly all of which were released into the open field. Thus, the pheasant stock within the State today is the result of an invest ment of less than \$20,000 in actual cash.

A large increase in the number of birds was apparent following the first plantings by the Game Department. The birds appeared to multiply more rapidly than they had during the earlier attempts by individual farmers to propagate them. From all indications, this was due to the fact that the earlier stock came from game farms and was more docile and less adept at fighting its own battles than the birds raised in a wild state. It is known that the egg clutches and hatches among wild pheasants are much larger than among those in captivity. Field hatches observed show an 80% hatch almost invariably. It was considered likely that many of the first plantings were killed off by birds of prey, rodents, and vermin. They also were just learning to adapt themselves to the weather conditions and the struggle for food. Once these qualities were developed, the pheasants began to thrive.

Some interesting facts concerning the superiority of birds raised in the open over those raised on game farms or artificially propagated were recently released by Leo K. Couch of the Bureau of Biological Survey.

"Pheasants reared on game farms cost, to the point of releasing, about \$2.00 each, while birds trapped on state and private refuges cost from 20 to 40 cents each," Couch said. "The naturally reared birds are healthy and more able to take care of

themselves in the wild," he continued. "From studies made in Ohio, it was determined that a naturally reared bird is worth one and one-half to two game-farm birds, and from three to six artificially propagated birds liberated at 8 to 12 weeks of age."

South Dakota has never operated a game farm. All breeding stock has been released into the open fields to propagate and rustle for themselves and their young. Many pheasants, however, have been transplanted from localities where they were thickest to counties where they were not so numerous. Trapping operations have been carried on chiefly in the counties along the James River, from where the birds are transplanted into the western counties of the State. The Sand Lake Waterfowl Refuge has become one of the most thickly populated pheasant areas in the State and during the winter of 1939-40 about 2,000 ringnecks were trapped there. Since 1926 a total of 25,000 pheasants have been trapped and transplanted.

Although the pheasants eventually adapted themselves admirably to the weather conditions of South Dakota, severe storms sometimes take a heavy toll even yet. The deep snows and severe cold of the winter of 1936-37 played havoc with the birds, causing losses estimated at from 50 to 90 per cent. The heavy, wet snows caused suffocation by clogging the pheasants! nostrils, and lack of food lowered resistance to a point where they were susceptible to the intense cold. Attempts were made to feed the pheasants, and organized groups of farmers and Izaak Walton League members probably saved many thousands of birds, but so many of them died that for a time it was feared sportsmen were to be deprived of one of South Dakota's finest hunting assets. Again in the fall of 1940, on Armistice Day, while the pheasant season was still open in many counties, an unusually severe storm caused heavy losses, generally estimated at about 20 per cent. Although the season could not be closed, sportsmen voluntarily refrained from any further hunting in most sections and again went out into the fields to feed instead of kill the pheasants. However, the final effect of the rigorous winters is beneficial instead of otherwise, as disease is almost unknown and only the most hardy birds survive. This helps to make South Dakota ringnecks almost perfect specimens of their kind.

Much credit for the abundance of pheasants throughout South Dakota is due to the non-partisan Game and Fish Commission, which decides the length of the hunting season and the bag limit from year to year. Many factors are taken into consideration, such as the amount of cover, available food supply, probable wintering conditions, and the actual number of birds in the field as determined by check-ups conducted by game wardens. Thus the pheasant, the first alien game bird to be introduced into the State, has within the short period of 20 years increased until it now outnumbers all other South Dakota game birds combined.

The Chinese ring-necked pheasant is the only pheasant stocked in South Dakota but in all there are 19 families of game and ornamental pheasants that have been classified and subdivided into more than 100 varieties and species. Most of them are natives of Asia, China, and the East Indian Islands but the common varieties of the true or "game" pheasant are more plentiful in the United States than in Asia or China. Most of the important varieties, such as the Mongolian, English Blackneck, Formosan, Reeves, Silver, and Golden Pheasants, can be seen in parks and aviaries in the State.

The cock pheasant of the ring-necked variety is not only the largest of upland game birds; weighing on an average of three or four pounds; it is also the most beautiful. The tail, fully 15 inches long, is gracefully pointed, dull ochre in color and barred with black. The back is beautifully variegated in a complicated pattern of deep maroon, emerald green, cream, yellow, and shades of black. The wings are for the most part maroon, and the breast a solid, rich burnt sienna, with violet under-

tones and black feather edges. The head and neck are a steely black, except for the crest. The white collar at the base of the neck, from which the bird takes its popular name, is perhaps the most conspicuous part of the color scheme. The face is chiefly red skin, with a crown of greenish yellow and a white eyebrow line. On either side of the head are short ear—tufts of black. Equipped with needle—pointed spurs, cock pheasants are fully capable of defending their nests and young against their natural enemies. They carry themselves with a lordly air and their raucous crow is a defiant challenge to the whole world.

The hen pheasant bears little resemblance to the male except for the feather pattern. It has no single touch of bright color, and this enables hunters to distinguish between the two with ease. The back is a dull ochre with rich, dark brown markings, while the breast is a lighter shade without markings. The tail is about half as long as that of the cock and is of the same dull color as the body feathers.

The pheasant is remarkably wise in the ways of men and beasts, and it soon learns the intentions of both. Once it becomes confident that no attempt will be made on its life, the ringneck becomes comparatively brave and the sight of pheasants feeding in the farm yards with chickens is common.

In speaking of the hardy character and adaptability of the ring-necked pheasant, Charles Askins, of Outdoor Life and The American Rifleman, says: "He is a bandit, and bandits thrive where honest men cannot find a job He knew more about men and guns and stealing a living before America was discovered than American game birds ever learned afterwards . . . The ringneck will come into a barnyard and lick a domestic rooster, if the owner stands by and laughs; but if the farmer dodges back into the house for a gun, the bird is gone where the soldier went who lived to fight another day."

Natural enemies of the pheasant are the common house cat, the smaller members of the hawk family, and the crow. The latter two destroy the eggs and young birds, but the house cat is considered by many observers as the most destructive. It has been estimated that a single night-prowling cat will kill from 20 to 30 birds a season. The weasel, mink, and skunk are other natural enemies but are not numerous enough to be considered a real menace.

Any one of several hazards during the nesting season may prove disastrous to the eggs or young. The nest in a hayfield is subject to two dangers, fire and the mowing machine. The destruction of the first nest, however, does not usually discourage the pheasant hen. She immediately begins building another nest; but the second setting of eggs is invariably smaller because her vitality is lowered, and it is also harder for her to stay on the nest. These late hatchings are invaluable, however, in maintaining the necessary breeding stock from year to year. The late hatchings are disregarded by the hunter and left to mature during the late fall.

Pheasants have been widely accused of the destruction of growing crops and there is some evidence that they may be harmful in certain localities when present in too great numbers. However, surveys undertaken by various agencies with the cooperation of the State Game and Fish Commission have proven conclusively that feeding habits of the pheasants are such that their usefulness more than compensates for the crops destroyed.

Among the harmful seeds that are readily eaten by the ringnecks are: foxtail, wild buckwheat, ragweed, wild sunflower, wild oats, wild oat grass, wild barley, Russian thistle, creeping jenny, and many others. They also eat potato bugs, cut-

worms, beetles and grasshoppers, although authorities are of the opinion that during the years of grasshopper infestation the pheasants did little to control the pest. Corn has been found to be the largest single item of their diet among domestic grains, with wheat and barley ranking second and third.

Current Museum Activities

Appointed to the staff of the Museum for the present academic year, are Mr. Robert Gant and Mr. Jerry Wade, part-time museum technicians. Mr. Laurel Wittwer has been appointed as a full-time carpenter. Mr. Gant's main duties will be aiding in the laboratory analysis of the various archaeological projects that were conducted by the Museum this year. Mr. Wade's task is working on the exhibits. During the coming year, the laboratories and storerooms of the Museum will be remodeled by Mr. Wittwer.

Mr. Lyle Lund, a student in the Museum Techniques course is working on the diorama of the American buffalo. Other students in this class will be assigned to remodeling the gun and rifle collections.

On Wednesday, September 27, the Vermillion High School Science Club met at the Museum to see movies taken on the various archaeological excavations of the Missouri Valley of South Dakota.

Several of the members of the course in the American Indian and the staff of the Museum removed three Indian skeletons from a field north of Richland, South Dakota. These were burials belonging to the Woodland Culture, judging by two accompanying potsherds. They were of the secondary or reburial type. An unusual feature of the graves is the fact that two of them extended to the present surface with the bones mixed in with the roots of the uppermost sod line. There was no sign, whatsoever, of an overlying mound. According to Mr. Alvin Searles, who was the first to break the original scd, there never was a mound over the burials. Possibly, however, since the site was on top of a rounded hill, the mound had eroded away many years ago.

Recent Acquisitions

Mr. R. L. Faubion, Millboro, S. D., donated the tooth of an animal that apparently belongs to an extinct group of rhinoceros. It was found in a gravel pit in a hill south of Colome.

Mr. David E. Lyng donated two fossil teeth belonging to a bison that were found on the shores of Lake Poinsett.

MUSEUM NEWS: Editor, Wesley R. Hurt, Director of the W. H. Over Museum. The object is the publishing of educational articles on natural history, archaeology, and other subjects relative to the Museum.