

special telescopes for the study of the sun and a 28½-inch reflecting telescope. This instrument is now in regular use in cooperation with the Sproul Observatory of Swarthmore College. It is being

used with a spectroscope in a research program measuring the speeds at which the stars are moving towards or away from the solar system.

Science News Letter, August 4, 1934

ORNITHOLOGY

First Ptarmigan Hatched In Captivity at Cornell

"STRONG and doing well" is the nursery bulletin on the first ptarmigan baby to be hatched in captivity.

Dr. A. A. Allen, head of Cornell's ornithology department, collected freshly laid ptarmigan eggs on an expedition to the Canadian outpost, Churchill on Hudson Bay. Bantam hens were persuaded to act as foster mothers in hatching the eggs which he rushed from Churchill to Ithaca. Out of 18 eggs set, only one hatched.

Related To Ruffed Grouse

The six weeks trip from which he has just returned was spent at Churchill, a small trading outpost 1,000 miles north of Winnipeg, and vicinity, and was for the purpose of making comparative studies of the ptarmigan, noting the similarities in life history between it and our common ruffed grouse, to whom it is closely related. Dr. Allen, an authority on the habits and breeding of grouse, has succeeded in rearing the birds free from the parasitic disease which is fast making this species of bird almost extinct.

Gathering the eggs of the ptarmigan for hatching was a difficult matter, since they had to be freshly laid in order to survive transportation. Dr. Allen reports that spring had just come to the north country when he left for the return trip. The ice was breaking up in Hudson Bay and great numbers of white whales and seals had put in an appearance. A snowstorm occurred the week before he returned and drifts as much as eight feet deep could be seen.

To Continue Study

Scientists left by Dr. Allen at Churchill to continue the study of Canadian birds have sent back another set of twenty eggs which are now being hatched. Several eggs have already been broken by the foster hen mother, but it is expected that there will soon be

more hungry mouths in Cornell's ptarmigan nursery.

Photographs and motion pictures of numerous little-known birds were also obtained. Among them were the golden plover and the arctic tern, which have the longest migrations of any birds known to science; the plover winters in southern South America, and the tern in the antarctic.

Pictures were also made of the Hudsonian curlew and the Harris sparrow, which is of especial interest to Cornell since Dr. George M. Sutton of the Cornell faculty was the first scientist to discover its eggs, during a trip to Churchill.

Accompanied By Students

Dr. Allen was accompanied by three Cornell graduate students who have re-

mained at Churchill to work. They are Fred M. Baumgartner of Indianapolis, Miss Margaret Heydweiller of Rochester, and Miss Theodoro Cope of Dimock, Pa. Prof. Guy Bailey of Geneseo State Normal School, who was also of the party, returned with Dr. Allen.

Science News Letter, August 4, 1934

ZOOLOGY

Tax Collector Takes Prince's Last Buffalo

COMPLAINING taxpayers in America, who groan that the tax collector is going to "take their last buffalo nickel," are better off at that than Prince Pless. Polish tax collectors, alleging unpaid arrears of four million marks, have taken his last buffalo—or more properly his last wisent.

The prince had nine of these exceedingly rare animals, zoological first cousins of the beasts that made Buffalo Bill famous, on his estate in Polish Silesia. Now the Polish authorities have them. They check them off against the prince's alleged unpaid taxes at a valuation of 5,000 zloty (about 2,500 marks) per head.

It is considered probable that the Pless wisent will be purchased by the Polish Agricultural (*Turn to Next Page*)



FIRST TO HATCH IN CAPTIVITY

Nestling in a human hand, this little ptarmigan or northern grouse is the first baby of its kind to be hatched in captivity. The event was thus recorded photographed by Dr. A. A. Allen, head of Cornell's ornithology department, who collected a setting of 18 ptarmigan eggs. Only the one baby successfully hatched.

Ministry, to be added to a small herd of the animals already living on a preserve at Bialosies.

Wisent, which look very much like the American bison or buffalo and are closely related to them, were quite common in European forests during ancient times. Modernly, however, their num-

ber dwindled, and the incidents of war and the post-war revolutions have almost exterminated the species. A few dozen survivors are being carefully tended in several European parks and game refuges, in the hope of building up the stock again.

Science News Letter, August 4, 1934

MEDICINE

Only Few Children Acquire Dreaded Infantile Paralysis

INFANTILE paralysis is the most dreaded of all childhood diseases, yet comparatively few children are attacked by it and of those few only a small proportion suffer from the paralytic form, says Dr. W. T. Harrison, surgeon of the U. S. Public Health Service, who has made a special study of the disease.

The great dread parents have of the disease is due to the very severe crippling which sometimes follows the infection. But the paralytic form of infantile paralysis is probably one of the least prevalent diseases of childhood. Even in epidemics seldom more than three or four children in a thousand are affected.

"Infantile paralysis can not be compared in infectiousness to such diseases as, for example, measles and chicken-pox, to which practically all children are susceptible," Dr. Harrison declared.

Re-education Greatest Advance

"The greatest recent advance in the treatment of infantile paralysis has been made in the re-education and training of paralyzed muscles," Dr. Harrison pointed out. "The treatment should begin during the acute stage of the disease in that proper splinting of affected muscles should be done to bring about complete quiet and to prevent deformity. As soon as the pain has disappeared massage and passive movements should be begun, followed by continued, consistent effort toward active control of muscles. Baths are valuable for the support of paralyzed members during muscle exercise. The treatment requires great perseverance, the direction must be sympathetic and expert, and can best be done by specially trained personnel not connected with the patient's family. Seemingly hopeless cripples can have a great deal of muscle function restored, but regular systematic exercise

must be continued for as long as two years from the acute illness."

If there is an epidemic, young children should be kept as far as possible within their usual environment and away from crowds, he advises. The disease is most prevalent during vacation time, so only necessary travel should be undertaken by children as they should not be taken from a district where infantile paralysis is not prevalent into one where there is an epidemic. During epidemics a physician should see all children showing any sort of upset associated with fever.

Dr. Harrison spoke over the Columbia Broadcasting System under the auspices of Science Service.

Science News Letter, August 4, 1934

ICHTHYOLOGY

Fish Census Shows Record Population in Yellowstone

A RECORD population of trout is available to anglers in Yellowstone Park, Wyoming, this summer. This is the report of a trout "census" just completed by the U. S. Bureau of Fisheries.

Basing their calculations on the number of eggs collected in the hatcheries this year, government experts estimate 75,000 to 80,000 as an absolute minimum for the trout population.

The season's take of eggs is the highest on record. The total muster of 38,190,000 eggs exceeds the mark of 1924, the previous record year, by about 6,000,000.

The eggs are secured from trout trapped on their spawning migration. Records show the average yield of eggs per female trout is about 900. Thus it took 42,000 females to produce the number of eggs collected. Since the

males and females are approximately equal in number, the Bureau of Fisheries experts were able to compute the total population.

Fishermen in many other National Parks will benefit from the Yellowstone haul. Content with a record number of parent fish in their rivers, the Yellowstone Hatchery will distribute the newly-born small fry among other parks that need restocking.

Science News Letter, August 4, 1934

ZOOLOGY

Flowing Lava Streams Saved Hawaiian Goats

IN CIRCLING the Big Island on his first day ashore in Hawaii, President Roosevelt may have skirted along a coastal apron where Mauna Kea has laid out her series of goat sanctuaries which, a century ago, lured the milch animal of the Mediterranean back to the wild and since has made it big game for sportsmen.

Mauna Kea, which is the highest island mountain in the world, rises from sea level almost to the altitude of Pike's Peak. It is a much larger mountain than the Colorado patriarch which starts from a mile-high plain. Until recently it was a volcano and sent many lava flows down its sides just as Mauna Loa, its twin sister not far away, is still doing.

These lava streams, like so many rivers of liquid fudge, flowed slowly and their surfaces, hardening, were broken up into jagged-edged masses. So were areas created that defied cow or horse or man yet were negotiable to the nimble feet of the goat. The lava flows became the empire of the goat.

Far away as Hawaii seems, it still is a wholly American, English-speaking community such as might exist in the cattle country anywhere along the Rockies or the Sierra Nevadas.

Domestic animals were unknown to the Hawaiians before white man came but the discoverer, Captain James Cook, who came to Hawaii while the Revolutionary War was being fought, put two ewes and a ram ashore. A tabu against killing them was declared and ancient Hawaiians revered tabus.

The goats multiplied inordinately. They spilled over into the wild areas up the side of Mauna Kea. When Americans came they saw this mountain area with eyes that knew the slopes of the Huachuca Range in Arizona and the Snake River country in Montana. They recognized it as cattle country. They es-