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IOWA CONSERVATIONIST

VOLUME 5

FEBRUARY 15, 1946

NUMBER 2

MULTIPLE USE OF STATE FORESTS

By G. B. MacDonald
State Forester

FORTY years ago the Secretary of Agriculture, "Tama Jim" Wilson of Iowa, wrote: "In the administration of the (federal) forest reserves, it must be clearly borne in mind that all land is to be devoted to its most productive use for the permanent good of the whole people." This was the charge given to the U. S. Forester at the time the federal forests were transferred from the Interior Department to the jurisdiction of the Secretary of Agriculture. The term "multiple use" was not stated but was clearly inferred. This policy has been consistently followed in the administration of the 185 million acres of federal forests and is largely responsible for the balanced program of land use between timber production, grazing, wildlife, recreation and soil and water conservation.

The multiple use idea is even more applicable to state forests of the central region due to their higher potential use. It is, therefore, a wise and conservative policy of the Iowa Conservation Commission which calls for the state forests to be developed as multiple use areas.

The history of our unmanaged forests has largely involved "one-purpose" use. The unregulated harvesting of the wood crops with little or no consideration for soil, water, wildlife or even the surrounding community has been too often the common practice. Iowa's woodlands, both public and private, have not contributed their full possibilities.

The private timber landowner is interested mostly in cash crops. His interest in multiple uses, which accrue primarily to the public, is usually incidental or negative. This situation makes the need for mul-

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Through a program of protection, management and adequate administration, state forest lands should produce a continuous yield of lumber and other forest products needed in the adjoining communities, and at the same time make possible a well-coordinated program of multiple use for wildlife or game development and recreation.—Jim Sherman Photo.

CONSERVATION OFFICERS EXAMINATIONS FEB. 25 APPLICATIONS CLOSED FEBRUARY 11

By K. M. Krezek
Chief, Division of Administration

THE first preliminary examination for state conservation officers since 1941 will be held February 25 in the Senate chamber at the State Capitol Building in Des Moines, beginning at 9:30 a. m.

More than 300 applications for conservation officers' positions have been received.

The examination has been prepared by John Holmes of Iowa State College, who is an expert in personnel selection and has writ-

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ROMANCE IN FURS

By Ellis A. Hicks
Cooperative Research Unit

ONE lucky day, quite a while ago, primitive man had the brilliant idea of using furs and hides both as clothing and to make himself more comfortable in his home. Since that time, furs have played a most interesting and colorful part in history. A fur was the chief point of interest around which was woven the classic tale of "Jason and the Golden Fleece." Although this fur was only a choice lambskin, it was of sufficient value to cause man to undergo difficulties and make sacrifices to obtain it just as we do today.

Battle accounts from Greek and Roman history mention furs as one of the most important spoils going to the victors. Outlying provinces and Teutonic tribes subject to government by the Roman Empire were assessed a tax to be paid in furs. It became the style for both men and women of the nobility to wear costly and beautiful furs. Soon it was generally accepted that an expensive fur was a trademark of royalty, for the common people were not permitted such a distinction. The pageantry of the Russian court at the time of Catherine II was world-renowned, largely because of her extravagant use of ermine and sable for her own clothing and as gifts.

Russian acquisition and colonization of Siberia were caused primarily by the vast and high quality fur resources which Siberia supported. Colonization of North America was directly affected by the European demand for furs. The Dutch East India Company established a trading post in New York. Many French trappers and traders operated throughout eastern and

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*Killed in action.

RAT RACE

The reproductive abilities of rats are amazing. A pair can produce six litters of eight in a year, and the young are capable of breeding when three and a half months old. Assuming no deaths and that sexes were produced in an equal proportion, a single pair could multiply to 880 rats within one year. In six years, under these perfect conditions, the original pair would multiply to 950,000,000,000 rats. What pair of rabbits could tie that one!

Insects are not singers; they are instrumentalists. Flies, mosquitoes, bees and some beetles vibrate to give a definite note. The cicada vibrates a pair of membranes or drums situated at the base of the abdomen. Some beetles burrow into old wood where they tap by striking their heads against the wood. Soldier termites do the same thing. Many beetles produce rasping sounds by rubbing roughened patches on the upper surface of the abdomen against similar areas on the lower surface of the wings.

"Jay-bird don't rob his own nes'."
—Joel Chandler Harris.



LOIS AMES

THE ASSOCIATE EDITOR RESIGNS

THE Editor regrets to announce the resignation of Lois Ames, who since the first issue of the "Iowa Conservationist" was "put to bed" in February, 1942, has attended to the multitude of details necessary to get a magazine in shape for the printer and into the hands of more than 20,000 readers each month. Miss Ames has accepted a secretarial position in the less exciting but more remunerative land of deeds and abstracts.

The Editor hopes for the best of everything for his very competent and loyal associate in her new job, but he can't help feeling a little like the husband left with a small child on his hands when "tall, dark and handsome" came along. Although the "Iowa Conservationist" is no longer in the "didee" stage, its readers will have to forgive any misspelled words and misplaced periods until papa finds a stepmother for the baby.

Good luck, Lois, and if T D & H doesn't "do right by our Nell," come on back home.

OUTDOOR IOWA MAP TO BE PRINTED

The State Conservation Commission has authorized preparation and printing of an "Iowa Outdoor Map," designed to show the exact locations of the various state recreation areas and outstanding hunting and fishing territories.

Twenty thousand copies of the new map have been authorized. In addition to a full page official state highway map, the obverse will have maps with locations of all the state parks and recreational areas explaining exactly the facilities available at each for public use. Also will be shown the location of favorite fishing waters, including the popular northeast Iowa trout streams, location of all public shooting grounds, and a game range map showing the centers of abundance of pheasants, quail, ducks and squirrels. The new map will be ready for distribution in early April.

INTO THE SHADOWS

By Ken Morrison
Minnesota Department of Conservation

Sometimes we think of conservation solely in terms of pheasants, deer, ducks and rabbits. Actually, of course, real conservation includes the protection of all forms of native wildlife, whether they be game or non-game species.

It seems likely that tomorrow's generations will not judge our current conservation efforts on the basis of the relative abundance of pheasants or waterfowl in any particular year. More likely they will look at the record of our treatment of birds and animals that today seem to be headed down "fading trails" toward extinction. Did we try to do anything about it?

Probably few Americans can now recall what the exact status of waterfowl was in 1914, for it is not of any particular significance. Yet the fact that the last passenger pigeon on the North American continent died in the Cincinnati Zoo that year is widely known and often referred to in print and on the platform to this day. The records show that at the time the passenger pigeon was being destroyed on a wholesale basis by market hunters, there was no concern over its fate because the numbers of the birds seemed "inexhaustibly abundant."

Perhaps, for this reason, conservation historians of the future will be less critical of the passenger pigeon era than of ourselves. They will note that we lamented loudly about the passing of the heath hen, Labrador duck, passenger pigeon, and other extinct birds, but probably they shall have to record that we worried about crows and foxes and did mighty little to save species that obviously were endangered in our time.

As in other fields, too many of our wildlife judgments are based on prejudice and failure to examine the facts. We pride ourselves on being a scientific nation, but when it comes to wildlife, too often we follow the "grandpappy did it" line. Elsewhere, Dr. Breckenridge points out what this type of reasoning has meant as far as the hawks and owls are concerned. Trigger-happy hunters who shoot at everything from white pelicans to duck hawks must be educated if we are to retain our wildlife heritage. The duck hawk (which only occasionally captures ducks) is one of Minnesota's rarest birds, so it is sad indeed to receive a report such as this one sent in recently by a St. Paul observer: "I still think ignorant persons are the worst enemies of our non-game animals and birds. After much cliff climbing on our last trip to the duck hawk eyrie we have had under observation, we determined that there was only one falcon yet alive there and that it had no nest. The presence of a number of .22

shells on top of the cliff which were not there a month earlier helped to convince us."

The duck hawk is not the only endangered species in Minnesota. There are many others—the spruce grouse, prairie chicken, burrowing owl, golden plover, the curlews, bald eagle, otter, fisher, and marten, to mention but a few. All of these creatures are protected by law, but they'll need something more than that to survive. Some perhaps would benefit from special sanctuaries, but they all need public appreciation of their plight so that their pitiful numbers will not be reduced still further.

There is no more tragic word in the conservation lexicon than extinction. It is depressing to contemplate that man has forever obliterated many of his fellow creatures from the face of the earth. Let us be vigilant so that it will not be said of us that the fate of certain species of wildlife rested in our hands and we moved not a muscle to save them from descending into the shadows toward extinction.

MAKING FRIENDS

There is no surer and quicker way for a newcomer in a village or a suburb to make friends among his neighbors than by means of his dog. Older inhabitants might otherwise pass by a newcomer in the street a hundred times without so much as a glance at the lonely man. But if the latter is leading a well-behaved and friendly dog on a leash, or if the animal is trotting unleashed at his side, many a stranger will stop to admire or pet it, and thus will fall into talk with its master.

Day after day, this will happen until a pleasant acquaintanceship or even friendship is built up from the daily chats—the theme of which is the newcomer's dog. For there are few things which form a stronger bond of friendliness between two strangers than their mutual interest in dogs.

This is not a theory, but an oft-proven fact. And many a dog has won friends in such a way for his master or mistress, and has relieved the latter's loneliness in a new neighborhood.

On the other hand, there is no surer way of becoming disliked or shunned in new surroundings than by the ownership of a savage or destructive dog, or of a dog that barks or howls all night. So the rule works both ways. It is up to the owner to train his or her dog right.

—Davenport Democrat.

"Well, young man," said the lawyer to his client, "I've found that I can get you a divorce all right. Your father-in-law didn't have a license to carry a shotgun."

Officer: "This man is charged with taking bananas off a fruit stand, your Honor."
Judge: "Ah, impersonating an officer. Two years."

Multiple Use . . .

(Continued from page 9)

multiple use development on state areas all the more necessary.

The adoption of the multiple use plan for the Iowa state forests does not mean a rigid application of all uses to any one area. The program should have sufficient elasticity to permit a sensible adjustment of the uses so as to get the greatest returns from a particular area. This may be production of wood products or, in many cases, social and community benefits which do not directly ring the cash register.

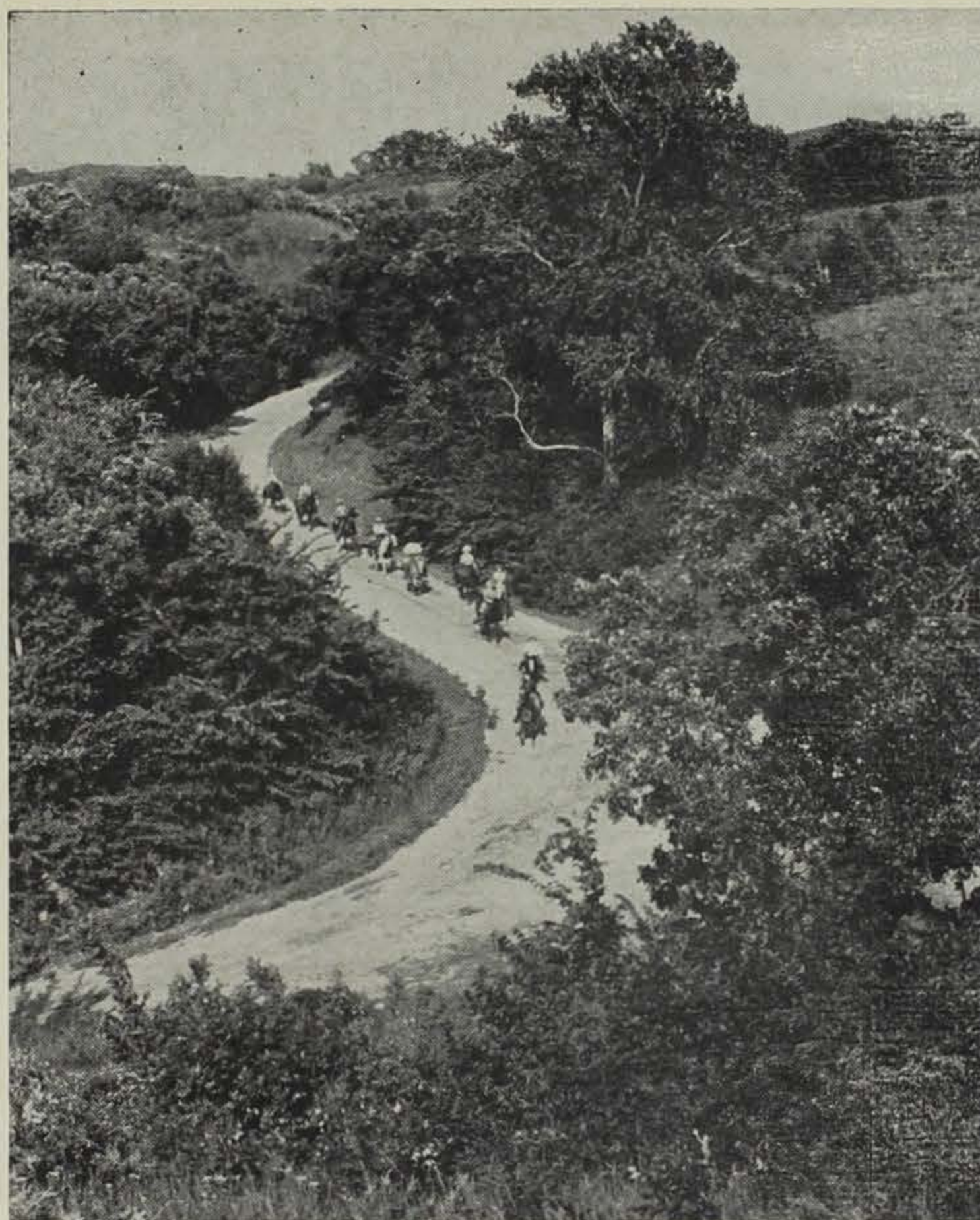
The state forest areas are located in the south central, southeast and northeast parts of the state. Their development to a well integrated multiple use capacity should demonstrate programs of wise land use, as well as bring in a substantial revenue from salable products and uses. Because of several generations of misuse of the recently acquired state lands, some time will be required to develop a full-scale multiple use program which involves soil, water, timber, game and forage resources.

Production of Timber Products

Iowa's woodlands, public and private, comprise approximately 2½ million acres. This is an area of high potential value for the production of lumber and other forest products. At the present time these lands are producing less than one-third of the possible production of wood crops. In normal times the state uses the equivalent of about one billion board feet of lumber, posts, poles, railroad ties, fuel wood and other timber products. Full production from Iowa's timberlands would go a long way toward supplying the timber needs of the state. Iowa's woodlands during the past several years have contributed several hundred million board feet of lumber toward the war effort. The farms are the big potential users of Iowa's timber products from both private and state lands. The greater use of locally grown lumber and timber products would save the Iowa communities large sums in transportation and other costs.

To get full value from our state forest lands will require protection against woods fires and destructive grazing of livestock. The continuity of a forest depends upon younger generations of trees coming on. This just doesn't happen when fire or livestock destroy the new seedlings as soon as they show above ground. Excessive and unregulated cutting has usually eliminated the most desirable trees. Proper management practices will gradually bring back the better species and restore the timber to its original productive capacity.

On some areas where the processes of destruction have gone to an extreme, drastic and relatively expensive measures are required to stop excessive erosion of the soil



The adoption of the multiple use plan for the Iowa state forest areas does not necessarily mean application of all uses to any one. The program should have sufficient elasticity to get the greatest returns from a particular area, and this may mean the social and community benefits which do not directly ring the cash register, as well as the production of wood products.—Jim Sherman Photo.

and restore a vegetative cover of smaller plants or trees. Already hundreds of acres of land on the state forests have been reforested.

Through a program of protection, management and adequate administration, state forest lands should produce a continuous yield of lumber and other forest products needed in the adjoining communities and at the same time make possible a well coordinated program of multiple use for wildlife or game development and recreation, and at the same time provide for the proper utilization of forage resources when this does not seriously interfere with other more important uses.

Wildlife Development

Throughout the ages the forest has been used for the hunt—in many cases to the exclusion of the common people. The state forests can be made to serve in this same way but not to the exclusion of the common people.

How may the public forests make their contribution? Perhaps not so much in cash returns in food, furs, licenses, sale of ammunition or other items, some of which would accrue to the state, but rather in the social and, perhaps, what we might call the aesthetic benefits which are contributed on a well regulated wildlife area. It is difficult to calculate

the social and health benefits which result in providing adequate hunting grounds for the sportsman and a field of observation for those who enjoy the associations found in the natural woodlands.

Most forest land is capable of producing some sort of game. However, the condition and kind of cover has much to do with the extent of wildlife development which is possible. The harvesting of mature single trees or groups of trees will usually produce a temporary change in the vegetative cover, which is conducive to increasing the population of certain game species. Also, roads or fire lines which are needed in the marketing or protection of the forest areas provide openings which make possible a variation in the plant cover which is important for such game birds as quail.

Census figures of game on the state forest areas in southern Iowa showed a rather remarkable increase in quail population over a three-year period. The increase was from 13 coveys, including 193 birds, to 76 coveys of 1,387 birds. The area involved was approximately 3,700 acres. The increase was due, in part, to the multiple use developments by the C.C.C. camps, which included planting of food patches and constructing ponds and winter shelters. The protection of the areas from fire and

livestock no doubt was directly responsible for some of the increase.

The fullest development of wildlife production consistent with other major uses may best be brought about by a program developed jointly by the divisions of the Conservation Commission concerned, the Soil Conservation districts, the Soil Conservation Service, and the U. S. Forest Service, as well as the interested departments of the Iowa State College and the State University. A program to provide adequately for a sustained yield of wildlife need not be either difficult or expensive. A proper distribution of food areas, water, protective cover and proper habitat for nesting, along with the elimination of fire, livestock and poachers, will go a long way toward securing desired results.

Recreation on State Forests

The extent to which state forests should be used for recreation depends upon how far the state or other public agencies have developed specific recreational areas within reach of the masses both from a standpoint of travel distance and other expense. The principal recreational concentrations should be at the parks and lakes where shelter, sanitation, parking, culinary and other needed facilities are provided. Fortunately, Iowa is well provided with such areas.

It is naturally assumed that the state forests will be major areas for hunting, fishing and trapping as recreational pursuits. It is not expected, however, that state forest areas will be developed with elaborate conveniences for the recreating public. The forests will have a real value, however, for those who wish to get into the woods and who have enjoyment in the forest environment without too many man-made conveniences. A reasonable use of the state forests for this type of recreation would be in keeping with a coordinated program for these lands.

For the limited state forest lands in Iowa there might properly be developed small picnic areas for the casual picnickers with no developments beyond those needed for sanitary purposes. Some camping might be permitted, if sanitary and fire hazards can be minimized. Only such roads as are needed for the major uses of the areas should be constructed. In this way, those people who wished to take their recreation "in the rough" could be accommodated.

Grazing on State Forests

Grazing, as has been previously intimated, is one of the "bad boys" of the forest. He and his next of kin, "the woods fire," might be considered the incorrigible twins of the woodlands. Perhaps that statement is a little too severe. However, on small forest areas which are managed for continuous pro-

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The extent to which state forests should be used for recreation depends upon how far the state or other public agencies have developed specific recreational areas within reach of the masses, both from a standpoint of travel distance and other expense. —Jim Sherman Photo.

Multiple Use . . .

(Continued from page 11)

duction, grazing of domestic livestock is not compatible with good forestry practice. On extensive areas, like the national forests, limited grazing can be carried on and still have the forest interest safeguarded. Under conditions in our state, if it is necessary to graze stock to any appreciable extent in the forest, it would usually be best to dispense with the trees and really use the land for grazing purposes. Too often the woodland has been considered a recreational area for livestock with resulting destruction of the young tree growth and other vegetative cover. The place of the woodland pasture, with some trees for shade for stock, is recognized as desirable; but in this case the production of forage is the major use. Heavy grazing in timberlands is neither compatible with sustained forest use nor good production of forage crops. Then the question might properly be asked: Should grazing of livestock be considered as one of the multiple uses of our state forests?

Grazing does have its place, but only on more or less limited areas within the boundaries on which forage production should be specified as their major use instead of wood or game production or other uses. In these cases the grazing areas should be fenced and the livestock definitely confined to such enclosures. Such lands will usually be available for lease to adjoining farmers and will serve the community by putting such lands to their apparent highest use.

Conservation of Soil and Water

Soil and water conservation are perhaps not correctly considered in this "multiple use" category. The saving of the soil and conserving the water supply are more the resultants of a wise use of lands for tree crops, forage, wildlife production or for social or community

interests. The soil and water are basic and, as such, should be first in the conservative use of an area. A multiple-use program which makes ample provision for a well integrated, sustained or long-time use of the state forest land will have as its foundation principle the saving of the soil and water upon which all the uses depend.

Conclusions

To sum up, the limited state forests of Iowa can be made to contribute in no small way to the production of needed products and also serve the respective communities in social ways which may in some cases far outweigh in value the material crops from the land. This can only be achieved by an approach which makes a sensible appraisal of the proper uses for each forest tract and the preparation and execution of such multiple use plans as will provide for their "most productive use for the permanent good of the whole people."

TREES AVAILABLE AGAIN FOR EROSION PLANTINGS

Trees for erosion control plantings upon farm lands for soil and water conservation and timber production will again be available this spring. Trees are available through the Iowa State Forest Nursery operated by the State Conservation Commission in cooperation with the U. S. Forest Service.

Species which may be purchased include black locust, green ash, American elm, black walnut, Douglas fir, and white pine. Prices range from \$3.50 to \$10.50 per thousand, depending on species, age and class of trees. Orders must total at least 500 trees, and not less than 250 trees of any one species will be supplied.

Order blanks are now available at the State Conservation Commission, 10th & Mulberry, Des Moines.

PRESENTING DR. WEATHERMAN

By the Cooperative Research Unit

THE DAY, February 2, which we commonly call Groundhog Day, is quite seriously observed in some parts of the world. Its history goes back to old times when the Romans burned candles to honor one of their goddesses, Februa (hence the name of our month, February). Later, upon conversion of Rome to Christianity, the candle-burning ceremony was retained as a church celebration. Eventually the name "Candlemas Day" was applied to it because of the large number of candles used in its observation. The candles were supposed to have the effect of frightening the devil and keeping evil spirits away from those who carried the candles. A tradition finally became prevalent in Europe that a fine Candlemas indicated more bad winter weather before spring arrived.

How the woodchuck became mixed up in this is not known—possibly because he is one of the most common animals we have which hibernates. According to legend, the woodchuck awakens on February 2 from his winter sleep, comes to the surface and looks around. If the sun is shining so brightly that he sees his shadow, he becomes scared and immediately scurries back to his den for six weeks more of sleep. But if the day is overcast with no shadow, he does not scare back into his burrow, but remains above ground as a portent of an early spring. In Scotland the prophecy is stated by two lines of verse:

If Candlemas is fair and clear
There'll be two winters in the year.



I guess there ain't menny things that's so hard fer a women to understand as why her husband complains o' bein' tired when he ain't been doin' nary a thing all day but fishin'.

I guess about the biggest difference between a fisherman an' a duck hunter is that when a feller ketches a big fish he kin gloat over it, and when a feller knocks down a coupla big mallards he's gotta ack like he's kinda bored.

I guess the fish skools has all discontinued since they built the Keekuk dam; now they all jes take individual instructions.

Professor Peabody says that the fourth dimension is the size o' a fish the fourth day after some feller has ketched him.

THINGS YOU MAY NOT KNOW

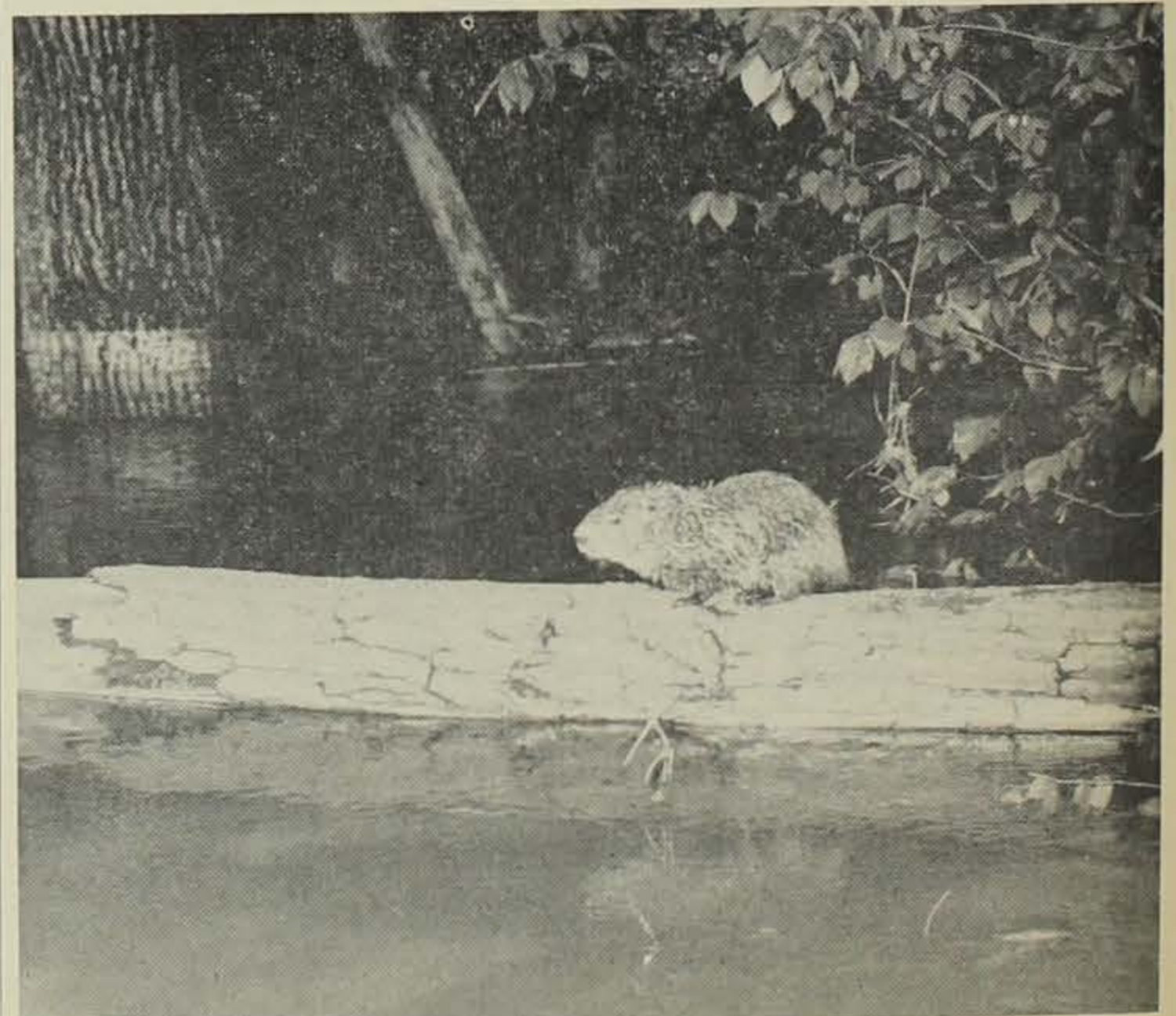
Oil of wintergreen is not only found in the shrub called wintergreen but is contained in strawberries, blackberries, raspberries, currants, plums, apples, peaches and some other common fruit.

A bird which sings as it flies is the goldfinch.

Cows are said to possess more "native" intelligence than horses, although horses can be taught mechanical movements more easily.

The drone bee should be able to see everything that goes on. His eyes have from 6,000 to 7,000 lenses.

The Attid spider "lives high." It is found on Mount Everest at an altitude of 22,000 feet.



The ground hog is a lousy weather forecaster. This one predicted fair and warmer and was drowned out of his snug burrow while sleeping on his prediction.



The Iowa Conservation Commission has developed an efficient field staff composed of men who are vitally interested in conservation. It is the aim of the Commission to further improve this efficiency and to improve field conditions through trained officers.

Examinations . . .

(Continued from page 9)

ten examinations for many nationally known industrial organizations. The examination will be divided into four sections designed to reveal general intelligence, cultural background, emotional stability, and out-of-door interests. The first two sections will be given in the morning session, the other two in afternoon tests.

Applicants are required to bear their own expenses in connection with the examination.

Under the provisions of statutes pertaining to the State Conservation Commission, employees whose duties are enforcement of the laws, rules and regulations of the Commission are known as conservation officers. This includes those employees engaged in state park work, formerly known as park custodians, those designated as lake custodians and also those engaged in the enforcement of fish and game laws, rules and regulations, formerly known as deputy game wardens.

Section 1703.41, Code of 1939, provides: "No person shall be appointed as a conservation officer until he has satisfactorily passed a competitive examination, held under such rules as the Commission may adopt, and other qualifications being equal, only those of the highest rank in examinations shall be appointed."

The Iowa Conservation Commission has developed an efficient field staff composed of men who are vitally interested in conservation. It is the aim of the Commission to further improve this efficiency and to improve field conditions through trained officers.

Rules Adopted by the Commission

Under rules adopted in accordance with the law by the Conservation Commission, the state is

divided into four districts as follows:

Northwest District: Bounded on the west and north by the state boundary lines, on the east by U. S. Highway No. 69 and on the south by U. S. Highway No. 30 from Ames to the Missouri River.

Northeast District: Bounded on the north and east by the state boundary lines, on the south by U. S. Highway No. 30, and on the west by U. S. Highway No. 69.

Southeast District: Bounded on the east and south by the state boundary lines, on the west by U. S. Highway No. 65 from the Missouri state line to Ames, and on the north by U. S. Highway No. 30.

Southwest District: Bounded on the west and south by state boundary lines, on the north by U. S. Highway No. 30 from the Missouri River to Ames, on the east by U. S. Highway No. 65.

From these districts the Commission will select by the preliminary examination an equal number of applicants, not to exceed 30 each to attend a school for conservation officers.

Requirements for Conservation Officers

1. Residence: Each applicant shall have been a resident citizen of the State of Iowa for a period of not less than two years preceding the date of the preliminary examination.

2. Age: The minimum age at the time of preliminary examination shall be twenty-five (25) years. The maximum age shall not exceed forty (40) years. Age limits shall not apply to those having military preference under statutory provisions.

3. Height: The minimum height shall be five feet, eight inches (5' 8") in the stocking feet, the maximum to be in relative proportion to weight.

4. Weight: The minimum weight

shall be one hundred forty (140) pounds stripped of all clothing. The maximum shall be in relative proportion to height.

5. Physical Qualifications: Each applicant shall be subject to a rigid physical examination and shall be free from physical defects which might affect his work, including a shortage or loss of a member of the body. A preliminary physical examination made by a licensed physician of the State of Iowa shall be part of the application, and cost thereof shall be borne by the applicant.

6. Previous Discharge: Previous employees of the former Fish and Game Commission and Board of Conservation or the Conservation Commission who have been discharged "for cause" are not eligible.

7. Soldiers' Preference: In considering applicants, preference will be given to honorably discharged soldiers, sailors and marines, as required by statute.

8. Character: Before any applicant is selected for the training school, he shall be subject to rigid moral and character investigation conducted by a person or persons appointed by the Commission or its agent, who shall conduct a full, fair and impartial investigation. The investigator shall certify to the Commission a full, true and accurate written report of his findings.

Training School

Applicants who qualify in the preliminary examination will be required to attend a training school of several days' duration. Expenses during the training school will be borne by the applicant. Dates and places of the training school are to be announced at a later date.

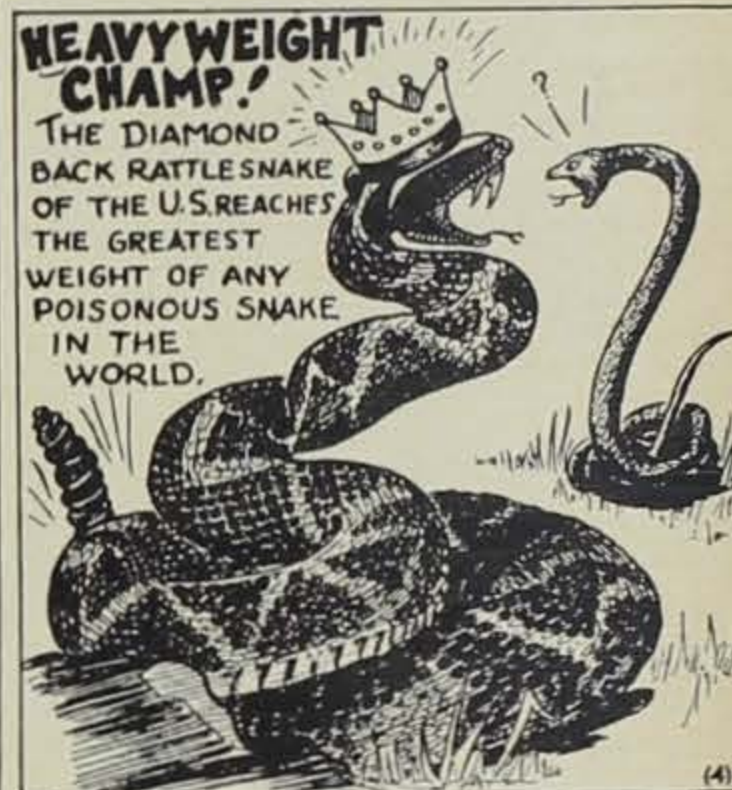
Final Examination and Appointments

At the close of the training school final examinations will be given to determine the ranking in the eligible list for each type of position.

The Commission in making any particular appointment will give consideration to the character and nature of the duties involved, and also the peculiar or special circumstances involved, or the facilities available, and may adjust the final grade or rank to take the foregoing into account. For example, a park custodian may be required where the residence facilities will accommodate a family of only four. Obviously, if the first on the eligible list had a family of six or eight, the facilities would not be sufficient. Again, the position might jointly involve the care of parks and fish nursery ponds, for which some by previous experience would be better qualified than others. Again, an officer might be required to serve first on river patrol. Obviously, the ones most experienced with boats and water would be the best qualified. Therefore, the eligible list will be one

Outdoor Oddities

BY WALT HARVEY



RECORD IOWA BEAVER TRAPPED

THE largest beaver ever recorded in Iowa has been trapped on the Little Sioux River in Woodbury County under a "nuisance" permit issued to L. Caton. Hank



This 71-pound beaver, trapped in northwest Iowa, is 16 pounds short of the state record.—E. M. Wogen Photo.

Behrens of Anthon trapped the giant animal, which weighed 87 pounds. The weight was verified by Conservation Officer W. W. Trusell of Sioux City. The largest beaver known to have been taken in Iowa prior to the new record weighed 81 pounds and was trapped in 1938 on the Missouri River near Sioux City.

for selection only, the final selections to be graded or ranked according to the particular position to be filled.

The eligible list as determined by preliminary examination, the conservation school, and the final examination will be effective until a subsequent examination is held or until it is declared void by the State Conservation Commission.



The story of furs in modern times is one of close association with styles, both for men and women. At one time a woman's affluence was measured as much by the number of fur petticoats she possessed as by the beauty of her outward furs.—Cownie Furs Photo.

Romance in Furs . . .

(Continued from page 9)

southern Canada and northern United States, specifically in our present Midwest. The English launched an enterprise known as the Hudson's Bay Company, which flourished for a period of almost two hundred years. Throughout this exciting period, the beaver was the most important fur bearer. So great was the demand for it, and so highly was it esteemed, that it was embossed on the first seal of New Amsterdam. Later, when the English gained control of North America to exclusion of the Dutch, the beaver emblem was still retained.

Needless to say, throughout the developmental period of the United States, fur bearers were exploited to the maximum along with our other natural resources. One of the first victims of the fur trade exploitation was the fur seal, common to the Pribilof Islands near Alaska. The Russian Government, prior to purchase of Alaska by the United States Government, instigated control measures for protection of the seal herds. This decisive action permitted the seal population to increase, but when Alaska was purchased by the United States Government, sealing privileges were leased to other nations for two periods of 20 years each. At this time the seal population was estimated at 2,000,000 animals. At the end of 40 years of continual hunting, the population was estimated at 132,000. The rapid decrease was caused largely by the practice of killing the seals in the water—a method used by Great Britain, Russia and Japan. In 1911, by agreement with all countries concerned, the United States assumed sole control of fur sealing operations. By means of a rigid conservation program, the seal population was increased to 1,000,000 during the first 15 years of control. This action is considered one of the finest examples of

governmental conservation of wildlife in the world.

The story of furs in modern times is one of a close association with styles, both for men and women. At one time a woman's affluence was measured as much by the number of fur petticoats she possessed as by the beauty of her outward furs. It was recorded of Napoleon that he faltered in his step under the weight of his coronation robe, so heavy was it with ermine. More recently, fashion shows have largely dictated what types of furs are worn. Of course they in turn are dependent upon various improvements in processing and tailoring. For example, skunk was comparatively unpopular until suitable methods were devised for deodorizing, and for cutting to eliminate white markings of the pelt. The sound of the word "skunk" did nothing to improve its sales appeal; consequently, it was given the trade names of black marten and dipped marten. The word "marten" sounds more glamorous than skunk; and in spite of the fact that marten is classed as semi-durable for wear while skunk is very durable, the addition of a sales trade name for skunk was instrumental in making it a popular fur. At the present time, skunk has come into an aura of glory all its own, and rightfully so, for it is one of the best-looking and most durable furs we have.

Many types of furs are dyed, plucked, clipped or otherwise so altered that it is impossible for the average person to recognize them. One of the best examples of this type of fur is the muskrat, which when sheared and dyed the color of the Alaskan fur seal, is known as "Hudson Seal." So exact is the imitation that an attempt to distinguish by superficial examination is often impossible. The durability and fine appearance of "Hudson Seal" have made it one of our most popular furs. It is extremely versatile in its appeal, and it can easily be restyled because of its pliability.



Iowa in two years has produced 1,174,635 muskrats valued at \$2,543,428.25. The furriers' art transforms the muskrat into beautiful garments such as this silver blue-dyed muskrat coat.—Cownie Furs Photo.

Up to the beginning of World War I, Europe definitely had a monopoly on the world fur trade. London, Paris, and Leipzig were the big fur trading and processing centers. Leipzig, especially, was the center for the fur dyeing industry. Furs were shipped from the United States to Leipzig to be dyed, then were returned for manufacturing uses. With the outbreak of war, however, the fur dyeing center shifted to New York, where it has remained to the present time. Water shipments to Europe were so restricted from 1914-1918 that the United States soon became the fur buying center to the exclusion of Paris and London. Some of the world's best furs from Kamchatka and Siberia, as well as from Japan and Australia, were sent to the United States. A start was all that was needed. As a result, the chief fur markets of the world are now located in New York, St. Louis and Montreal.

In spite of the amount of care in handling, processing and manufacturing now given to furs, the statement "Fine furs are born—not made" still obtains. A fur is durable or perishable, prime or green, healthy or unhealthy. No amount of doctoring can render a moleskin as durable as mink. Nor can any treatment change a pre-season pelt into a prime one. Iowa is fortunate in having three kinds of fur bearers whose pelts are classed as very durable: mink, skunk and raccoon. The durable and semi-durable types include muskrat, fox and opossum. Weasel, squirrel and rabbit are classed as semi-perishable; nevertheless, rabbit has been dyed, clipped, sheared, plucked, pointed and called names more than any other type of fur.

To settle some of the questions and controversies which have arisen concerning furs ever since trade names became a common practice, a listing of trade names for various finished fur products is given, followed by the type of animal from which the fur was originally taken.

What's in a Name?

Alaskan sable—Skunk.
American broadtail—Lamb.
American sable—Marten.
Arctic seal—Rabbit.
Astrakhan—Lamb from southern Russia in vicinity of Astrakhan.
Australian seal—Rabbit.
Baffin seal—Rabbit.
Baltic black fox—Rabbit.
Baltic brown fox—Rabbit.
Bay seal—Rabbit.
Baum marten—North European marten.
Bea erette—Rabbit.
Black Alaska fox—Fox.
Black hare—Rabbit.
Black marten—Skunk.
Bluerette—Rabbit.
Broadtail—Persian lamb (still-born or killed when a few days old).
Buckskin seal—Rabbit.
Canadian marten—Fisher or marten.
Canadian sable—Marten.
Caracul—Lamb, synonymous with "Persian" and "Broadtail."
Castorette—Rabbit.
Chapchilla—White rabbit dyed to resemble chinchilla.
Chinchilla—South American rodent.
Chinchilla squirrel—Squirrel.
Chinchillette—Rabbit.

Chinola—Squirrel mottled to imitate chinchilla.
Clivet cat—Spotted skunk.
Coney—Rabbit.
Coney beaver—Rabbit.
Coney leopard—Rabbit.
Coney mole—Rabbit.
Coney seal—Rabbit.
Dipped marten—Skunk.
Electric mole—Rabbit.
Electric nutria—Rabbit.
Ermine—White rabbit.
Ermine—Usually applied to Siberian weasel.
Erminette—White rabbit.
Fitch—European pole-cat.
French mole—Rabbit.
French sable—Rabbit.
Genet—Usually black domestic cat.
Hudson Bay sable—Marten.
Hudson Bay seal—Rabbit.
Hudson seal—Muskrat.
Hudsonia—Muskrat or nutria.
Krimmer—Lamb from the Crimean region of Russia.
Kolinsky—Siberian mink.
Lapin—Rabbit or hare.
Loutrine—Muskrat.
Marmink—Marmot dyed to resemble mink.
Mendoza beaver—Rabbit.
Minkony—Rabbit dyed to resemble mink.
Molin—Rabbit dyed to resemble mole.
Moline—Rabbit dyed to resemble mole.
Mouton lamb—Sheared Merino lamb.
Muskratine—Rabbit.
New Zealand seal—Rabbit.
Northern seal—Rabbit.
Nutria—Coyu rat of South America. Known also as South American beaver.
Nutria beaver—Nutria.
Nutria seal—Nutria.
Nutriette—Rabbit.
Polar seal—Rabbit.
Pony—Foal of Russian horse.
Red silver seal—Rabbit, muskrat or nutria.
River mink—Muskrat.
River sable—Muskrat.
Russian black marten—Opossum.
Russian brown marten—Opossum.
Sabeline—Squirrel.
Sable fox—Red fox.
Sealette—Rabbit or nutria.
Sitka fox—Red fox.
Squirrelette—Rabbit.
Squirreline—Rabbit.
Summer ermine—weasel.
Twin beaver—Rabbit.
Visonette—Rabbit.

NATIONAL WILDLIFE WEEK DATE SET

National Wildlife Week this year has been set for the week beginning March 17. Proclaimed by President Roosevelt in 1938, it has been sponsored annually by the National Wildlife Federation.

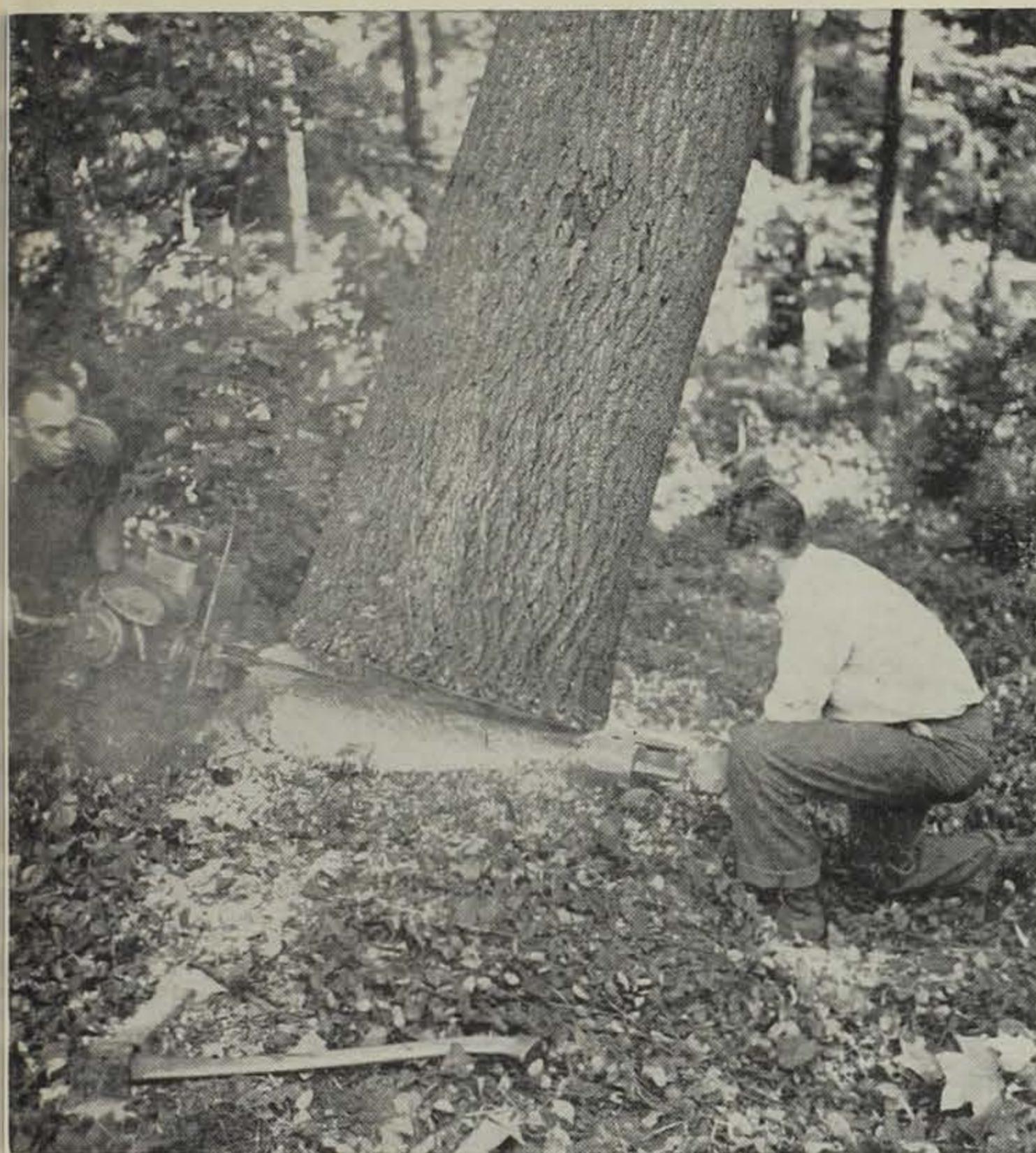
How the conservation of wildlife is related to soil, water and plant control will be the underlying theme of those conservationists who, through the press, over the radio and from the public platform, will tell this dramatic story to the nearly 20,000,000 Americans interested in the out-of-doors and the creatures that inhabit it.

Each year the National Wildlife Federation issues a sheet of Wildlife poster stamps reproduced from paintings by famous American nature artists. The current issue has 40 studies of birds, mammals, fish, flowers and trees in the 64 stamps on the sheet.

Clubs, societies and individuals interested in securing further information about Wildlife Week activities should write the Federation at 20 Spruce Street, Boston, Massachusetts.

It was Autumn, and incessant
Piped the quails from shocks and
sheaves,
And, like living coals, the apples
Burned among the withering
leaves.

—Longfellow.



Felling a 36-inch tree with a Disston-Mercury chain saw. If this tree had been cut 12 inches higher, there would have been a loss of more than 50 board feet.—Farm Forester Photo.

Power Saws Come to Iowa

By Frank Longwood
Farm Forester

TWO men wearing staggged pants and checkered woolen shirts approach a towering cottonwood tree carrying between them what appears to be a cross between an outboard motor, a washing machine, the front end of a motorcycle, and the remnants of one of Rube Goldberg's zaniest creations. A quick pull on a short rope attached to this contraption and a roar like thunder is heard. What looks like a bicycle chain holding the two ends of the outfit together is, in the matter of a second or so, revolving like mad.

Steadily and easily they hold this revolving chain to the trunk of the tree, where it eats its way through the wood faster than a beaver with 40 hungry children. After perhaps 30 seconds the cry of "Timber-r-r-r" is heard and another giant of the forest crashes to the ground.

This is modern logging in Iowa. The day of the aching back is on the wane. The chain saw—for that's the name of this machine—with all its time and muscle-saving glory, has arrived. For all but the smallest operators the cross-cut saw is being laid away and the gasoline powered chain saw taking over. But even they have found a way to relieve the back in the use of one of several popular makes

of drag saws powered from their farm tractors.

Chain saws are not new in the lumber industry. In the redwood and Douglas fir forests in the West they have been used for a number of years. There the usual power is air pressure or electricity furnished by tractor mounted compressors and generators.

Shortly after we became an active participant in the war, it became apparent to everyone involved that there was an unlimited market for Iowa lumber from any tree and of any grade or size. This market meant that the amount of money to be made depended entirely on the volume of production and the efficiency of the operation. Without further ado, the larger operators invested in chain saws. Oh, yes, they investigated first. After all, they cost from \$600 to \$1,000 fully equipped.

The first adventurous loggers soon were cutting more logs in a day using one chain saw than a half dozen or more men equipped with the conventional type cross-cut saws of the Paul Bunyan days. Furthermore, they were realizing greater profits on every log cut.

It wasn't long before everyone was interested. For many their interest soon matured into the ownership of a chain saw. Production went up and so did their profits. They knew we had the

timber. All that was needed was a way to get it harvested.

High Production in '45

Lumber production in Iowa rose from a few million feet in 1940 to nearly 57,000,000 feet in 1944. The first 10 months of 1945 saw more lumber cut than in all of 1944. When all of the reports are in for 1945, it will reveal a total of lumber cut that exceeds any previous year since 1889, when 68,000,000 feet of native lumber were cut as the loggers began branching out from the lake states. It may even slightly exceed the 1889 cut, making 1945 the year of greatest production of native grown lumber in Iowa history.

Several makes of chain saws are in use in Iowa, but all operate on the same principle. They are usually powered with a two-cylinder, air-cooled gasoline motor of from five to 11 horsepower. The chain or cutting bar is available in many lengths. Most useful size for Iowa seems to be the 36-inch length that will handle all of our trees except the largest. Next to this is the 3½- and 4-foot size in popularity. With this length chain there aren't many trees but what can be handled, and with ease.

Two men are necessary to operate them, one on each end. One man controls the motor fastened to one end. The second man holds the other end and does most of the work in pressing the revolving chain into the tree. Usually a third man is used to relieve the other two and to drive wedges and do other chores. Total weight of the saw is in the neighborhood of 100 to 135 pounds. This allows it to be carried from tree to tree without difficulty.

Many operators use the saw to notch the trees previous to felling. Others still do this with the old cross-cut and the axe. They then buck up the tree bole into logs with the chain saw.

15,000 Feet in Four Hours

Just what they are capable of producing or what the average production per day is dependent on the type of timber being cut and the efficiency of the crew operating the saw. One sawmill operator in central Iowa felled more than 15,000 board feet in trees in a four-hour stint. He and his crew of two men didn't, however, buck the trees up into logs in this period. He estimated this would have taken another four hours of hard work.

Reports have been received of as much as 20,000 board feet being cut in an eight-hour day by a crew of three men operating one chain saw. It appears to be a frequent occurrence to cut 10,000 feet.

In average timber and with a good crew it should be possible to cut on an average of 8,000 feet a day. This will bring the costs down to about half or less of the usual figure and increases production from 100 to 300 per cent. Walnut producers seem to be one excep-

tion. This is due, undoubtedly, to the excessive travel time, scattered trees, and the fact that many trees are cut below ground level.

"But where," you say, "does this leave the logger who can't afford the \$600 to \$1,000 for a chain saw? His back becomes equally as tired as the fortunate fellow with the \$1,000."

Drag Saws Adaptable

For this man something else is available. He can buy a drag saw for as little as \$150. This is an attachment to be operated by a power take-off on the ordinary farm tractor, in which a conventional cross-cut saw is fastened. It is considerably slower than the chain saw, but has an advantage inasmuch as it can be operated by one man. When ready to move to the next tree the outfit is swung into a vertical position where it is held by a specially placed bar.

A number of these have been constructed by the loggers themselves at much less than the purchase price. In most every instance they are well pleased with the results. Some have altered the procedure and attached them to the front of the tractor. No matter where they attach them, the back is spared, production goes up, and costs go down. This is what counts.

Self-Propelled Tree Saw

By now the skeptic is wanting to ask, "But what about the fellow without a farm tractor?" For him there is another solution. He can buy the self-propelled tree saw. It costs more than the drag saw, but less than the chain saw. However, for general woods work in Iowa they have not proven to be as satisfactory as either of the other two. For land clearing and harvesting of pulpwood they have been satisfactory.

The conservationist may look
(Continued on page 16)



No matter how large the tree, they don't come too large for the chain saw. This 42-inch tree was felled with ease.—Farm Forester Photo.



Inverted bucking or sawing from the bottom side to the top side is almost impossible with a cross-cut saw. It is easily done with a chain saw. This Disston-Mercury saw will make the cut in about 30 seconds.—Farm Forester Photo.

POWER SAWS

(Continued from page 15)

with bewilderment at these new machines capable of cutting our forests at double or triple the rate of previous years. He wonders if they are just another addition to the host of others already mutilating and destroying the natural resources. Perhaps, he thinks, this is but a hastening of the end.

There is little doubt but what there are areas in Iowa being ravaged by loggers with chain saws. However, these areas would be cut by hand, even if they didn't have the power saws to use. In most of these instances the landowner insists on this type of cutting through ignorance of the value of his woodlot.

The total volume of lumber cut each year is a different matter. Even now, we aren't coming close to harvesting the average annual growth of wood in Iowa forests. In normal years we cut far less than the normal increase in our timber resources in the state. At the present our problem isn't how much we are cutting, but rather how it is being cut.

Power Saw and Conservation

Power saws by reducing the costs per acre will allow lighter cuts to be made on our forests, meaning fewer trees cut in each woodlot for every time through. More frequent cutting will result. Why should a logger use his expensive equipment to harvest small trees he knows will just barely pay out when he can move a mile or two and cut large, mature trees at double or triple the profit?

If the power saw will help us to instigate the practice of cutting only mature trees, then it will have made an outstanding contribution to conservation as well as to the backs and pocketbooks of the loggers.

Each year more timber is lost through grazing, fire, insects and disease than is harvested. Iowa is no exception. In fact, grazing in Iowa woodlands alone destroys more timber than we harvest. This loss in revenue from timber greatly exceeds the value received by

pasturing the woodlands. In addition, while the stock are on the poor woodland pastures they are producing only a fraction of the milk or beef that is possible if they were on improved grassland pasture.

Regardless of the effects of the power saws on conservation practices, they are here to stay. One Iowa logger sums it up this way: "Never again will I break my back with a cross-cut saw. If I couldn't use a power saw, I'd quit the logging business in a hurry." He wasn't smiling when he said it, either.

WHEN IS THE JACKRABBIT NOT A RABBIT?

Dipping into the general field of zoology from whence our fundamental information all comes, we find that the answer is "Always"!

In other words, we find to our dismay that a jackrabbit isn't a rabbit at all, but a much different animal, in spite of the fact that we have called it this all of our lives.

Those who should know tell us that the animal is a hare, and they further point out that the two terms are not interchangeable in the least. Just to mention a few things, they say, rabbits usually live in regions of rather heavy cover, such as brush and trees, have shorter ears, use burrows or at least crawl under piles of brush, trees, etc., and they bear their young in such places. The young are born with their eyes closed and have no fur, something like mice.

The hare, on the other hand, has longer ears, usually uses a "form" or picket in the ground or snow for sleeping and concealment, and is often found in the open. Their young are born in these "forms" also. The young are born with their eyes open and possessing a coat of fur.

Our "jackrabbit" is really a hare, they say, and should be called the "plains hare."

Our cottontail rabbit is really a rabbit, they say, but our snowshoe rabbit is another hare, the "varying hare" (because it changes color of fur seasonally).

—North Dakota Outdoors.

FARM PONDS

Missouri continues to advance its program of small farm ponds. Already it has more than 30,000 of them and aims at an ultimate of 500,000. These ponds are considered so important to the whole farm program that the Agricultural Adjustment Administration is putting up \$100 toward the cost of ponds on farms that can qualify. One of the important provisos is that the pond must be fenced.

Ponds from a quarter to a half acre and eight to 10 feet deep are recommended. These cost from \$50 to \$200. Average cost so far has been \$127.—National Wildlife Federation.

BY RIGHT OF CONQUEST

River knocked hard at the farmer's pane;
He shook the door and knocked again;
"Get off my property," said he,
"Or I'll throw you off it bodily."

"It belongs to me," the farmer cried,
"And to my father, before he died;
And to his father, by patent sent
Direct to him from the Government."

"Oho!" said the River, "You seem to forget
It belonged to me ere Congress met.
I take what's mine; not any man
Can stay my claim or thwart my plan.

"I'll bring my helpers, Rain and Ice
And Wind and Snow, and in a trice
We'll break your puny levee and dam.
Now try to stop us, if you can!"

And the farmer laughed and went to bed.
"Old River is drunk again," he said.
"I've heard his boasts and threats before,
And I've always kept him from my door.

"Tomorrow I'll put him in his place.
I'll drive him back; I'll punch his face;
He'll land in jail for threatening me.
I'll stop him once and for all, you'll see."

But River was in a drunken state;
He cursed and raged and broke the gate
And swiftly ran over all the land,
Dealt death and destruction with either hand.

And as he raced on his way to sea,
He staggered and shouted angrily.
"What's mine I take," was his drunken chant,
"And woe to the man who says I can't."

—Allen James.

BIG GAME INCREASING

Big-game animals in the United States have been increasing during recent years at a more rapid rate than the human population according to the Fish and Wildlife Service. The population of all animals classified as big game within the United States totaled 7,148,422 in 1943, compared with 6,748,424 animals in 1941, or a gain of 5.9 per cent. During the same period the gain in the human population amounted to less than 1 per cent.

The state with the largest big-game population in 1943 was Pennsylvania, with 1,104,655 animals, nearly all of which were deer. Michigan ranked next with 731,407, followed by Minnesota with 631,877, California with 597,625, and Oregon with 584,261. Iowa's big game population estimated at 1,250 consisted entirely of white tail deer.

Deer greatly outnumber all other big-game animals, the white-tailed, mule, and black-tailed deer together comprising 89 per cent of all the large game in the country. At the other extreme is the woodland caribou, now on the verge of extinction within the United States, with only 15 animals reported.

In addition to the deer, big-game animals found in the United States in numbers exceeding 100,000

are prong-horned antelope, elk, black bear, and peccary. Relatively scarce animals with populations ranging from 1 to 16,000 are the bighorn sheep, mountain goat, moose, buffalo, European wild boar, and grizzly bear.

Populations of deer in the United States reached their lowest point about 1915, when there were only about three million of these animals in the country. Although the present distribution of deer is less than a quarter of their ancestral range, the general trend of the population has been upward.

The peccary or javelina, the only American pig, showed a higher percentage of increase than any other species. In 1941 the reported population was 54,120; in 1943, 111,785.

The prong-horned antelope is continuing to increase in numbers. As recently as the late 1920's this species seemed doomed to extermination, although early explorers had found it nearly as abundant on the Great Plains as the buffalo. Through the efforts of wildlife conservationists, however, refuges for the antelope were acquired and through this and other means the population has been increased from a few thousand in the twenties to 246,090 animals.