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The GOLDEN AGE

By BUREN SPARKS

WHERE and when was the Golden Age? Some say it was yesterday, others say it will come tomorrow, but to me the golden period of out door sports, fell in the decade known as the "gay nineties." You are my age, stop for a moment and review with me that memorable day.

Then, there were no wars on with boards and rationing offices. The world was at peace and the great outdoors was not all cluttered up with posted signs. You could hunt in the pasture, thresh pecans in any stream and swim naked in any water. There were no game laws, you could buy a good fishing outfit for a few cents; shot gun shells sold for a few cents and a box of 22's cost only fifteen cents.

Each quarterly season ushered in its own peculiar sport and joy. In the Spring, the short, prairie ranches were alive with big, Mallard ducks. You sneaked up on them and shot them with black powder and lead pellets. The attending explosion could be heard in the next county, the noise would knock you flat and the loud smell of the black powder could be smelled a mile away, but what a thrill to come home with a brace of mallards swinging from your belt. Then in May those selfsame ranches, gurgling a sweet song, lured you to their confines to pick the big, black dewberries, that lined their marshy banks. You got home with a gallon bucket full and then Mom could make a good ole pound cake and the family would gorge themselves with bowls of berries, cream and sugar. I can still see the purple juice floating around on top of the yellow cream and almost taste the flavor that only wild dewberries can give.

Neither should we forget the last two weeks in April, for in that month would come the great migration of plovers and curlews. I think these two birds gave out the most plaintive cry of any bird that ever winged their way over the prairie lands of the Lone Star State. On a windy, misty night in April, my imagination can still hear those birds as they call to each other on their migration to the up-lands along the Canadian border. What would you give today, old timer.

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TEXAS Game AND Fish



Vol. 3

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No. 1

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COVER—International Champion Black Brigadier, Labrador Retriever, owned by Dr. Howard Granberry of Austin, Texas. Painting by Carlton West.

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ANTELOPE HUNT



THE first antelope hunt in Texas in 41 years was a complete success. Of the 328 hunters afield, 90.5 percent were successful in taking one of the 297 antelope killed. Hunters and ranchers alike were pleased with the methods used in conducting the hunt, which was the first supervised hunt ever undertaken by the Game, Fish and Oyster Commission.

Gov. Coke Stevenson made the first kill of the hunt at sunup the opening day, October 2, on the Kokernot ranch near Alpine. His selection was a trophy that served as a mark which only a few other hunters were able to surpass before the end of the three periods of hunting, October 11.

Although the Commission authorized the assignment of up to 500 antelope permits, only 402 were issued because that was the number recommended by field men who surveyed the herds on each ranch. Of the 402 places, 20 percent were reserved for the landowners if they wanted them. Thus, only 371 were available for those who made application. At the time of the deadline for the public applications, August 29, a few less than 371 had made applications and a drawing was therefore unnecessary. During the days immediately after the

By DANIEL W. LAY
Director, Division of Wildlife Restoration

deadline, additional applications were received, the remaining places were filled, and some applications were returned. Many hunters expressed the attitude that they did not make application because they thought hundreds of others would. It is expected that this cause for hesitancy about making applications will be much less in evidence if future antelope hunts are held.

The Commission was able to conduct the antelope hunt because full regulatory power over wildlife in the counties west of the Pecos was vested in it by the last Legislature. The surplus antelope resulted from long protection by the ranchers and game wardens of that section, and from trapping and restocking operations of the Federal Aid Division in recent years. Some of the bucks killed had tags in their ears, a record of their having been trapped and transplanted within the past five years. Since no hunting had been done and the natural sex ratio is approximately 50-50, a surplus of bucks was on the range. A sex ratio of one buck to five does is thought suffi-

cient for satisfactory breeding. So in spite of the fact that antelope are still on the increase, no harm was done by the hunt.

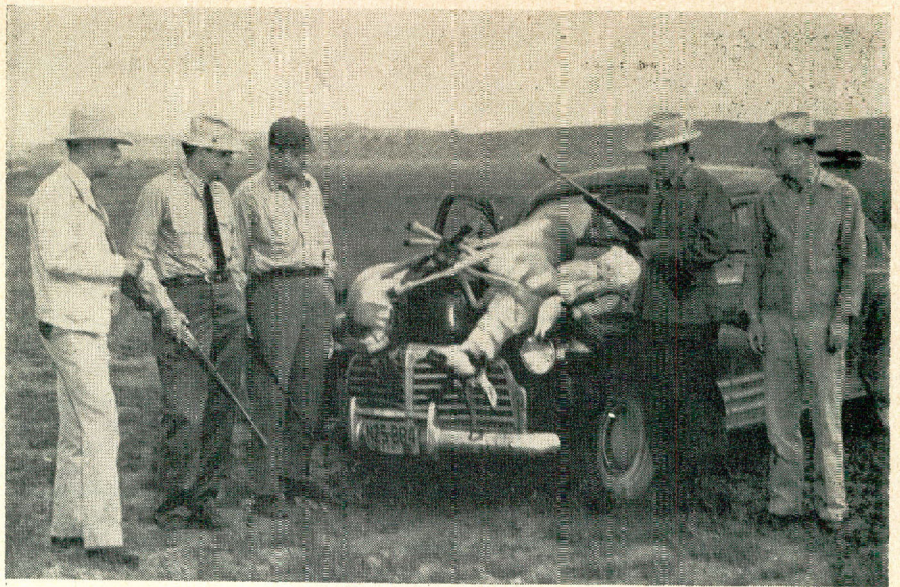
The high degree of success of the hunters in getting their antelope reflects the vulnerability of the species and points to the fact that all future antelope hunting in Texas must be regulated as to the number of animals taken from specific pastures if the species is to be maintained and increased.

Several ranchers who were apprehensive about the disturbance hunters would cause on a ranch did not participate in the hunt, but will be ready to cooperate with the Department if another hunt is held next year. It is likely that from 500 to 700 surplus antelope will be available for a similar hunt next year in the Trans-Pecos region. Also, a few ranches in the Panhandle should be surveyed for the possibility of killing perhaps a hundred in that section next year. However, it will be necessary for the legislature to provide the necessary regulatory authority before any such hunt could be conducted outside the Trans-Pecos.

A special antelope permit was sold to the successful applicants for \$5.00 and this fee hardly paid the costs to the Department of conducting the hunt, since

a number of extra game wardens were moved long distances to help supervise the hunt. The landowners operated licensed shooting preserves and were permitted to charge hunters not more than \$25 each for access to the antelope. Most of them made this charge. Since all of the hunting was on private lands (Texas does not have the vast acreages of public domain other states use) the cooperative participation of the individual landowners was necessary.

The hunt on the 27 ranches was divided into three sections. The ranches around Alpine were hunted October 2, 3 and 4. Those around Marfa were hunted October 5, 6 and 7. Those in Hudspeth and Culberson counties were hunted October 9, 10 and 11. This facilitated the close supervision of the hunters. Hunters were checked in and out of their assigned pastures by regular game wardens. This degree of supervision was necessary because antelope do not cross fences readily and it was necessary to limit the kill by pastures. It was also desirable to work closely with each party of hunters because the chances of having other hunts later depended upon the



FIRST KILLS—Gov. Coke Stevenson and his secretary, Ernest Boyette were among the first hunters to check in with their antelope. From left to right the hunters are Ranger Capt. Gully Cowsert, Ernest Boyette, Kenneth McCalla, Austin attorney, Governor Stevenson and George Willaby, foreman of the Kokernot ranch on which the Governor and his party bagged their antelope. Below—a section of the cold storage plant at Alpine where the antelope killed during the first legal antelope hunt in Texas in 41 years were stored. The average dressed weight of the antelope killed was 94 pounds.



GOV. COKE R. STEVENSON and the fine antelope buck he bagged soon after sunup on the opening day of the antelope season on the Kokernot ranch near Alpine. The Governor is an ardent sportsman and one of the best rifle shots in the state.

ranchers' being satisfied with the conduct of the first hunt.

Most of the hunting was done with the aid of automobiles, used for stalking, but shooting from automobiles and chasing antelope in automobiles was prohibited. In some of the flat grassland pastures hunters afoot would have had little chance of success; but in the rougher foothill country automobiles were often useless and there was enough cover for stalking afoot. A few hunters used horses. One serviceman hunter arrived by train, killed his antelope, and got it back to Waco in good shape by carrying it on top of buses at night and holding it in cold storage during the day.

Only six game law violations were discovered (and under the strict supervision few could have escaped notice). Four hunters paid fines for killing does, through shooting into running bands, which was prohibited. One hunter shot from an automobile. One hunted without a permit. Only one accident came to our notice. An over-anxious hunter jumped out of an automobile before it stopped and broke his leg. Crippling losses of antelope were very low, probably under ten.

Checking stations were operated at the ice houses in Alpine and Marfa by biologists Henry Hahn, Frank Etheredge, and the writer, for the purpose of obtaining data on the condition of the antelope for comparison with statistics from later hunts. At some future date this data may reflect valuable information relative to serious changes in the size, age classes, and condition of the Texas antelope. It is also interesting to compare the Texas measurements with those taken in other states.

The record weight (dressed by removal of all organs) was 94 pounds. Record horn length was 16 inches, circumference $6\frac{3}{4}$ inches and spread $16\frac{1}{2}$ inches. But these records were on different trophies. The average weight was 72.1 pounds.

Arizona has conducted three such antelope hunts, and it is interesting to note that only 73.9 percent of the hunters were successful on the 1941 hunt which was their first one. But the antelope killed were somewhat larger, the record weight being 101 pounds and the record horn length being $18\frac{1}{2}$ inches.

The six most popular rifles among the hunters checked on the Texas hunt and the number of hunters using each were: 300 S, 41 hunters; 306, 22 hunters; 30-30, 22 hunters; 270, 17 hunters; 35, 12 hunters; and the 30-06, 11 hunters.

The prospects for additional controlled antelope hunts in the future are good. Hunters like them because they give them access to hunting most of them could not obtain otherwise, and ranchers like them because they are relieved of



the responsibility of supervising the harvesting of the game and the monetary compensation interests some of them. Most of the ranchers participating in the antelope hunt never operate shooting preserves for other types of hunting such as mule deer because of the trouble involved. In spite of the extra work for the limited personnel of the Department and the necessary regimentation (which none of us like) this type of controlled hunt seems to have much to offer in the Texas hunting field. Biologically it is certainly the soundest method of managing our big game herds.

New Pollution Drive Planned

Claiming that carefully drawn laws and the untiring efforts of various associations had failed to halt pollution of fishing waters in the United States, Julian T. Crandall, well-known angler of Ashaway, R. I., suggests the formation of local "Minute-Men" committees for the protection of fishing waters.

Pointing out that the angler cannot afford to "let George" handle the preservation of his sport, he urges that vigilant committees of fishermen be formed to keep a sharp lookout for evidence of local pollution and to arouse and bring to bear public opinion to the end that such pollution may be stopped abruptly before it gains headway.

Upon the slightest sign of pollution, the Minute Men would go into action. The first step would be to call on the responsible party and have a showdown. If that did not bring results, they would hold a meeting and invite the press. Committee men would talk up the shameful situation to their friends and neighbors. Laws "with joints stiff from lack of exercise" would be invoked. If conditions were bad enough, a mass meeting would be called to arouse the citizens.

"No one, no organization of any kind, can buck public opinion and get away with it," Mr. Crandall states. "Not in this country, at least."



A RARE DOG—Shown with seven coal-black pups whelped Sept. 27 in the same litter is Berry's Snowball, a solid white Cocker Spaniel male owned by Tom R. Berry, Paris, Texas. According to best information available to him, Mr. Berry said his white Cocker is the fourth whelped in the United States. Mother of the litter is Berry's Black Lady, who seems a wee bit bored in

the picture. The litter was sired by Berry's Own Sonny Boy. Both sire and dam are registered and the five little males and three females will be registered individually when they are a little older. The last reported white Cocker was whelped in Piedmont, Calif. No—the white pup is not for sale.—Photo courtesy of the Paris, Texas, News.

WAIT . . . BUT NOT TOO LONG

Tips on Duck Hunting

THIS SEASON, when ammunition shortages put a premium on every shot, the duck hunter should train himself to judge distances, study leads, consider the killing distance of his loads—and act accordingly.

This advice from C. C. Mitchell, noted sportsman associated with the Remington Arms Company, applies not only to duck shooting, but to any type of upland game hunting. Don't shoot too soon, he warns, but don't wait too long.

Every seasoned duck hunter has seen over-enthusiastic gunners opening up on "sky-high" flying ducks, which probably would have swung into someone's decoy stool if given a little time and some encouragement from a properly handled duck call. The untimely and futile firing

merely causes the flight to flare higher and hightail it for other parts.

The more the hunter learns about judging distance, Mr. Mitchell points out, the more proficient he becomes. The majority of ducks killed today—stone-dead in the air—are dropped at 35 yards or under, he believes. Shotguns are factory-patterned at 40 yards. Distances in the hunting field, and particularly over open water, are confusing to the beginner, and even to the average hunter. A real 40 yard shot on a flying duck, easy enough for an experienced gunner, frequently is estimated at no less than a 70 yard chance. And distances assume

different complexions when estimated in the timber and on open water.

Good advice to the gunner is to practice distance estimating by snap-judging the distance between familiar points—the space between trees, lamp-posts or the height of buildings, all of which can be checked easily. Visualize a flying bird at each distance, check the measurement and you'll be surprised to find how far off you are. The average quail shot at is close to, or under, 20 yards. Yet many sportsmen have boasted "clean" kills at 60 yards. Quail, and certainly pheasants, can carry a lot of lead—and many fall at that distance, but the "clean" kill is something else again.

The expert, who knows distances, leads, and killing range of ammunition,

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CONSIDERING the almost unlimited possibilities for substitutions in the field of minerals and inorganic, un-renewable materials, we can say with considerable degree of confidence that there will be no "bottle-neck" in the long run of metals for industrial needs and human requirements, at least in times of peace.

It is unfortunate, however, that in the process of producing substitutes for metallic materials, an extra strain is put upon the organic sources of materials, where the real bottle neck is located.

Running through the whole scale of new plastic materials: Rayon, Nylon, Lucite, Plio-film and the Bakelite group, to mention only a few, the constituent elements are chiefly of organic origin and every known organic substance, living or dead, has come and must continue to come through that single agency of green leaf chlorophyl plus sunshine. If there were any virtue in wishing, we could wish that our alchemists would pick on something besides carbon to transmute into mineral substances. Everybody wants to use carbon for something or other and no one has ever been able to make any.

In the field of heat, energy and power production, there is no fuel which is not of organic origin, with the possible exception of mineral oil, whose mysterious origin has not been satisfactorily proved. Both coal and oil must be classed among the non-renewable resources and any substitutions must come from the organic or vegetable family. Synthetic gasoline, the alcohols and all combustibles are made from organic matter. Then add further to the strain on the organic bottle-neck all the foods we eat (whether animal or vegetable) all the textiles, linen, cotton or wool, all the millions of tons of paper used daily, all the gun-powder, cigarettes and feathers on women's hats. To put all expended energy also in the list would involve some duplication but its drain upon organic resources is so vast a daily item that it should not be neglected in the comprehensive concept. From the tiniest flip of a fish's tail to the throbbing engines of the largest steam turbine in the world, every move burns up, directly or indirectly, some of the organic matter laboriously produced by the minute green cells in leaves.

Picture then in your mind, if you will, this vast army of human demands lined up like a breadline before a soup kitchen and waiting to be served by that sole producer of relief rations, the green pigment in vegetation, and you will get a new conception of what a "bottle-neck" means. There is no other source. Without green vegetation there is no chlorophyl. Without soil and water there is no vegetation. Every grassy plain or forest

Which will it be???
POVERTY
OR
CONSERVATION

by Jay N "Ding" Darling

Last month Mr. Darling called attention to the wanton destruction of our natural resources and the alarming point to which many of them have ebbed. Now he tells what can be done to prevent further destruction through wise use of them.

denuded of its vegetation and every marsh drained of its water by man's wasteful practices constricts the bottle-neck. Every careless farmer who by negligence allows the topsoil to wash from his land shortens the period of time that his soil can contribute to human needs.

Among modern current events I can think of no more excruciating mental agony than must have been suffered by those battered troops on Bataan Peninsula, scanning the skies to the east in vain for the relief planes which never were to arrive. That is very real to all of us, and tragic in our total helplessness to aid. I wish it were possible to dramatize for you the utter hopelessness of our situation on the North American continent when through failure to heed conservation warnings the pinch of organic shortages overtakes us all and from which no relief will be immediately available.

There was a time when population pressures on this continent were easily relieved by opening up new lands. Today there are no new frontiers. We must sit down where we are and plan our subsistence for the next ten thousand years on what we have left of our organic resources.

Today we are all busy with war. Everyone is employed, or should be. But tomorrow when the war is over we will be again confronted with the problem of peacetime employment. The trials of the late depression are too recent not to be remembered. But no one seemed to take seriously the fact that our population had increased by leaps and bounds while

our soils, grasslands, wildlife and forests had shrunk by at least ninety million acres within the last decade.

Did you ever play "Going to Jerusalem" or "Musical Chairs" where the guests at a party march to music around a double row of chairs which contains fewer seats than there are guests? When the music stops everyone tries to sit down. Because there are fewer seats than there are players somebody generally sprawls on the floor or is left standing without any chair. Then another chair is removed, the music and marching start again and so on until there is but one chair left.

One hundred thirty million people in our country have been playing the same game only we have been using land instead of chairs and an amazing number of people

already have no place to sit down. Then, if we add the distressed populations of Europe who must be fed, our little game becomes serious business indeed because the exploitation of resources for war in the interest of national survival has exceeded any peacetime exploitation we have ever known. When the emergency is past there will be new bald spots on the surface of our continent where natural resources have been exhausted. Those bald spots will spell less food and more homeless men.

In our desperation, if we follow our customary pattern we will juggle the currency, reduce working hours and redistribute wealth, we may even try substituting Dictatorship for Democracy, but none of them nor all of them put together will restore the soils we have so wastefully depleted. Such inventions of the sociologists and economic doctors will be of no avail in reforesting our cut-over timberlands. They cannot reclothe the Dust Bowls with grass by social reform, neither can they bring back the eroded topsoil from the Mississippi Delta and put it on the abandoned farms. Once exhausted, there is no simple cure. Only a public aroused to the dangers can provide the prevention before it is too late.

Conservation becomes, then, not a matter of sentimental appreciation of the beauties of Nature. Neither is it an idle humor of cloistered scientists in their experimental laboratories. It is grim business for statement and government executives and we won't have statement and executives who will know what it is all about until the teaching fraternity takes over the job of educating a new crop.

Some day a new historian will arise who will revolutionize our study of the past and give us a much better understanding of the problems which we ourselves are meeting. This new history will give us an interpretation of the causes

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BANDANNAS ARE VERSATILE

THAT the large type bandanna in both the red and the blue color can be utilized for purposes other than wiping one's nose is evidenced by the many uses experienced outdoor men have put them to in an emergency when afield or astrream.

The bandanna's usefulness outdoors is not something new, for its value and aid to sportsmen dates back to early American history. The cowboy of our western plains and deserts used it, not for its decorative effect as most people believe, but to protect his nose and mouth from dust storms, and from the dust raised by the cattle's hooves as he rode herd or on the trails to market.

Logging men of the past decade used it during winter to protect their ears from frostbite when ear muffs were not available. And last but not least, the Boy Scouts wear a bandanna not merely as an ornament, but for a diversity of purposes such as an emergency bandage, a signal flag, a tourniquet, etc.

Thus outdoor men need not bemoan some of the articles they forget, break, or lose on a hunting, fishing, or camping trip because nine times out of ten a bandanna can often be substituted adequately for them. They can be substituted for anything from a belt that will hold up your pants, to caulking for a boat in order to keep you afloat.

The average outdoor man about to embark on a trip into the wilds should carry no less than two bandannas in his possession at all times, and two more tucked away in his pack basket or duffel bag. Then if he needs them they will not be parked on the shelves of some dry-goods store.

In case of personal injury such as a snake bite or cuts that sever a vein or artery a bandanna may spell the difference between life and death. It can be applied as a tourniquet by looping it around the arm or leg and tying the ends together so a stick can be inserted and twisted to stop the flow of blood or spread of poison until the wound can be properly treated. Sure, other articles of clothing can be torn up into strips that will serve the same purpose, but a man

A wet bandanna tied over your face while fire fighting will keep you from choking to death.



By F. J. FLOSS

Illustrated by Harold Bush

needs all the clothing he has to keep warm, especially when traveling light or when the weather is cold, when weak from such an injury.

For aches and pains a cold or hot compress, depending on the remedial measures necessary, made from a bandanna will give relief from headaches, sinus trouble, bee and nettle stings, and mosquito bites. If a bandage is needed for the head, hand, arm, leg or foot it will serve in that capacity too. If you sprain an ankle it will serve as a triangular bandage to ease the pain until you get back to camp.

When gunning where there is a large concentration of hunters you can use two bandannas for protection by sewing a red one on the back of your hunting coat, and by taking another one, splitting it, and sewing it on each side of the front of your coat. Its vivid color will serve to warn other hunters that behind it is a man, not a four-footed animal.

Around the camp, a bandanna tucked in over the belt and let hang down will serve as an apron, keeping grease and other bits of food from staining one's breeches. Leftover food during summer months can be covered with it, thus cheating flies and other insects out of a meal at your expense. It will also serve as a hand or dish towel, a wash or dish rag, a coffee bag or a table cloth.

On the trail a neat bag for carrying fruit, mushrooms, berries, etc., can be improvised from a bandanna by tying the four corners together so that they overlap each other. Hoboes use this improvised method to carry all their worldly goods, hanging it on the end of a stick slung over their shoulders. And the timid man who has qualms about drinking directly out of a lake or stream, need have no fear of waterworms or of dirt getting into his mouth if he places

a clean bandanna over his mouth and sucks the water through it.

Two bandannas will help you find game you have downed at long range. Tie one at the point you shot from, then walk over to where you thought your game fell. If you don't find it there you must have miscalculated. So, tie a second bandanna where you thought it fell, retrace your steps to the first bandanna, then look across at the second and see how far off you were from where you first marked your game down. Next, go back to the second and move right or left from it. If you don't find it then, start out by making an ever-widening circle around the spot until you find your quarry or a blood trail. This system localizes your hunt and gives you a point to work from covering a small area, where on the other hand you would have a lot of territory to cover and never know just where you were.

A bandanna can also be used in many ways to protect the head. For instance if you lose your hat or cap you can substitute a bandanna by tying it over your head in the following manner: first, lay it flat over the top of the head, then take the two corners that are in front and pull them back over your ears and overlap and tie the part at the back of your head. Tied this way it also makes a good bathing cap that will keep that troublesome hair out of your eyes. On bright sunny days it will keep the back of your neck from becoming sunburned. If you fold it over and over until it is only about two inches wide, then tie around the head, just about the top of your eyelashes, you will have a sweatband that is hard to beat. Furthermore, if you ever have to help fight a forest or brush fire you will find that a wet bandanna tied over your face bandit fashion will

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Some safety minded hunters place a red 'kerchief high on a twig near where they are hidden.







A DEER PROOF ELECTRIC FENCE

By J. G. BURR

DEER can be kept out of any field or garden if the right kind of electric fence is built. Also such a fence is very economical and can be built by any one whose intelligence is a little above that of the deer he is trying to outwit. It is a very simple thing and yet it is a precision job.

Warden Bill Garrett of Center Point, in charge of Kerr and Kendall counties, is the originator of the fence which has kept deer out of the farms of Kendall County for the past five years, and there are many farms in that county.

As farmers have frequent contact with County Agent Gardner, Warden Garrett has placed with him material

THIS IS HOW your black bass looks under the X-ray. This black bass was caught in Lake Austin by Miss Mela Kunz, X-ray technician of the Richardson Laboratory. Curious as to how a black bass looks under the X-ray, Miss Kunz took the bass to her laboratory and placed him under the X-ray. The result is shown on the opposite page. The picture shows why the big mouthed black bass is called a big mouth. The dark, almost oval shape in the center of the bass, is the stomach. Note the perfect design along the lateral line.

DECEMBER, 1944

AT SYLVAN BEACH

Out of the distance the seagulls flew,
As daylight followed dawning;
One by one and two by two
They came, in the light of the morning.

They lit on posts that stood in the bay,
Where once a pier had extended—
Posts aslant and weathered and gray,
Their usefulness long ended.

A beautiful bird with the sunbeams came;
And occupied post he demanded;
He was squawked at and called an opprobrious
name
For his arrogance high-handed.

He turned to the perch of a second bird,
His feet stuck out for alighting;
Raucous reviling the still bay heard:
As the holder bristled for fighting.

And so he flew to another post,
One held by a gull chicken-hearted,
Who of protest made not even a ghost,
But lifted wide wings and departed.

The aggressor took over; it was his place now;
His heart of shame was free.
O bird of loveliness and grace,
How close akin we be!

—Julia Beazley

for the construction of an electric fence which is ready to be installed by him or by Mr. Garrett whenever there is complaint of deer depredation by any farmer. It is a money-back guarantee that it will do the work when either of these men supervise the installation.

To build one, get an ordinary six volt auto battery and as much staywire as will be required to string a single wire around your farm just outside of the regular fence. Staywire is a very small wire that can be bought for ten cents a pound. If your farm fence is as much as five feet high, string your single wire five feet from the outside of your farm fence on low stakes which when driven in the ground, will still stand 22 inches above the ground. If your fence is six feet high, place the single wire six feet away from the farm fence. Small insulators are required on the top of each stake to prevent leaks

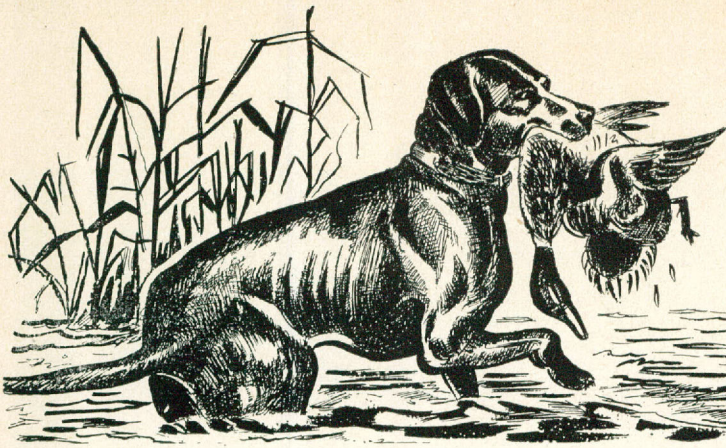
of the electric current to the ground. Hook the wire to the battery and run the ground cable to an iron rod in the earth. The other end of the wire must not touch the earth.

When a deer or any animal touches the wire he completes the circuit to the ground and gets a shock never to be forgotten.

In a six months test the power of the battery was not depleted and the battery water did not dry up, being well sheltered and in a water-proof box, according to Mr. Garrett.

Some ranchers string a charged wire on the top of the regular fence. The deer hops lightly over without touching the wire, which is absolutely worthless unless to keep one from climbing into a watermelon patch. As a partition fence, ranchers string a single charged wire about four feet from the ground instead

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Your DOG

THE COCKER SPANIEL

By R. D. TURK, D.V.M.

THE dog has been a faithful companion and friend of man probably longer than any other domesticated animal. Throughout the years man has experimented with the breeding of dogs, selecting or adopting them to particular needs or purposes. At the present time over 100 breeds of dogs are officially recognized in the United States. These dogs range in size from tiny Mexican Chihuahua to the giant St. Bernard and vary almost as much in hair covering, anatomical makeup, disposition and color as in size. Yet in spite of all the differences in the individual breeds, animals, all dogs have many qualities in common. Those qualities of loyalty, faithfulness, unselfishness, courage and usefulness, which are present in individuals of every breed, have endeared dogs to the human race for untold centuries.

Many different types of dogs have been designated as the most popular breed from time to time. Styles in dogs change as in other things. The Cocker Spaniel is probably the most popular dog in the United States today. A brief description of this dog and some of the qualities which contribute to its popularity and something of its origin will be given.

The name Spaniel indicates that these dogs were natives of Spain. From Spain the ancestral stock spread to other countries. In England the smaller type dogs were known as "Cocking" Spaniels and used to hunt woodcock. From this designation the term "Cocker" originated.

The reason for the popularity of this breed as a whole is not difficult to determine. The affectionate and merry disposition, the actively wagging tail, and beautiful eyes make him one of the most attractive and lovable of all dogs. In addition, his small size as compared with that of other sporting breeds makes him especially desirable for a companion in the house as well as in the field. The ideal Cocker is a sturdy, rugged, surprisingly fast little dog. The body is

short, muscular and well proportioned. His power of scent is excellent. He may be self-colored or parti-colored, but if self-colored, the color should be sound throughout. White on self-colored dogs is objectionable.

The Cockers are the most versatile and adaptable of dogs. They are excellent to shoot over as they work close and they make excellent retrievers. Perhaps the greatest one desirable char-

acteristic of the Cocker is companionship. They are especially nice companions for children. However, they adapt themselves readily to almost any situation. If one wishes to romp, the Cocker is ready. If one prefers to read, or merely sit and meditate on one's sins, the Cocker is perfectly content to lie at one's feet. He is truly sorry to see his master leave and glad to welcome him home.

Bandannas

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help keep the smoke from choking you to death.

During severe cold weather a bandanna has many uses, too. It can be tied over the ears to prevent frostbite. As I mentioned before you can protect your chest from the cold by tying it around your neck in a triangular shape and stuffing it down in the front of your shirt. In the event you have no sun or snow glasses it will prevent snow blindness by tying it over the eyes if it is coarsely woven. If it is a close weave you can punch two small holes in it with a stick far enough apart to see through. And when gloves are forgotten, cover your hands or wrists with bandannas and they will keep warm.

Bandannas can also be used as caulking for your row or power boat if it develops a crack while away from port. Pound one tightly into the crack with any blunt tool that is aboard. It may leak a little, but it will keep most of the water out and enable you to reach port without swamping the boat.

If you break your only fishing rod when traveling light you can repair it by binding it with strips torn from a bandanna, and make it do until you have finished your trip. Likewise if the cork comes off the grip on your rod a ban-

danna wrapped around it will make a fair substitute and keep the metal from biting into your hand. Then too, if a guide is knocked off, it can be tied back on with thin strips torn from your kerchief. And if the reel lock breaks—they often do—it can be tied back on with more bandanna strips.

Guns can be repaired in the field to some extent if the break is not connected with the mechanism. For instance if you fall and crack or break the stock or forearm you can put the gun back in shooting shape by binding it well with strips torn from your bandanna. If you run out of cleaning patches for your gun such strips will also solve that problem, by tearing them into small squares.

If you ever decide to hunt alone in unfamiliar territory, away from your main hunting party, you need not be afraid of becoming lost if you mark your back trail with strips torn from your bandanna. All you have to do is follow them back to camp.

A bandanna will also make a good substitute for a worn-out sock. You know the kind I mean—the one that always develops a hole about five miles out of camp and lets the big toe protrude until it feels like the sock is trying to cut off the end of your toe. This has happened to me many times and how good it feels to get the bothersome thing off.—*Pennsylvania Game News.*



ARMS AND AMMUNITION

Edited by A. S. JACKSON

SOME SHOTGUNS AND LOADS

IF YOU grew up with a single barrel shotgun and now have, or desire, a repeater, it probably will be a gun with the single sighting plane—pump, automatic, or over-under.

Large numbers of sportsmen believe the double barrel to be the finest looking, best balanced and easiest handling shotgun. A fine double is a beautiful thing to behold. Many states are requiring that pumps and automatics be plugged to three-shell limit. This may make the double even more popular, if possible. The automatic shotgun, or any sporting arm, for that matter, is highly dangerous, especially for the beginner. After the first shot it is always **LOADED** and **COCKED**.

Most sportsmen, of course, know the type shotgun that suits them best. So let's go into a discussion of loads. Here are some that are recommended.

The advent of "progressive burning" powder and its application to shot shells probably is the most important development since the invention of smokeless powder. Ordinary, or "flash" powders develop their maximum energy about the instant the shot charge is started forward through the gun barrel. Progressive burning powders ignite slowly and develop energy gradually, reaching maximum energy after the charge has been started forward. The result is high velocity and relatively low pressure.

An excellent 16-yard trap load is 3 drams equivalent of powder, $1\frac{1}{4}$ ounces No. $7\frac{1}{2}$ or 8 chilled shot, used in full choke barrel. For skeet, with the 12-gauge 3-1- $\frac{1}{8}$ -9 chilled; in 16-gauge, 2- $\frac{1}{2}$ -1-9 chilled. For ducks and geese the 12-gauge standard 2- $\frac{3}{4}$ " load with $1\frac{1}{4}$ ounces of shot give fine results with shot sizes 2, 4, 5, or 6. Small game birds and animals, such as quail, grouse, marsh hen, dove, rabbit and squirrel are not difficult to kill.

The effective killing range is usually 40 yards or less. A fast load with relatively small shot works fine here, in a modified choke, of improved cylinder barrel. Loads of 3 drams equivalent of powder and $1\frac{1}{2}$ ounces of 6, 7, $7\frac{1}{2}$ or 8 chilled shot, or 6, 7 or 8 soft shot will do

the job. Number 6 shot is ideal for rabbits, as most all Georgia hunters well know.

Shot smaller than No. 8 and larger than No. 6 are not so good. Game is often torn up badly with small shot at very close range, or it may be wounded and get away if hit at ranges over 40 yards. Larger sizes of shot will not pattern effectively on small game since there are not enough pellets in the load. Crows and hawks may be an exception. A heavy load with No. 5 or 6 chilled shot will bring them down.

For deer hunting, with the shotgun, you will find the rifled slug more effective than buckshot. It has much more wallop. Since the shotgun is a smooth-bore, the manufacturers, several years

ago began loading a single slug into the shotgun shell, with rifling on the outside of the slug.

This gives a result similar to the rifle. At 50 yards these loads will group into 3 to 5 inches, which is mighty good for a smooth-bore gun.

They may be used safely in any modern shotgun of any standard bore, full choke right through cylinder bore. In 12-gauge the slug weighs 1 ounce. At 50 yards the velocity is 1470 F. S. The striking energy at 50 yards is 1485 foot pounds. Remember again, it is that striking energy that brings 'em down. In this the 12-gauge slug compares favorably with the famous old "thirty-thirty" rifle, and for deer there is none better.

Wait—

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can make shots which are awe-inspiring to the novice. But, unless one is an expert with the heavier loads and super-choked guns, conservation authorities counsel against this type of shooting. Far too many cripples result from such chance shots.

Don't shoot as soon as you see a flight winging high over you, cautions Mr. Mitchell. You may cripple a duck but you won't bring him down. And you'll certainly spoil the other fellow's chances. It not shot at they may swing back to you. Don't wait, however, until you see the whites of their eyes."

"Remember," he says, "the tighter your gun's pattern the more ducks you'll miss at close range—or, worse, tear to pieces. Wait until you can identify the species clearly or, to use an expression common in the mallard country, 'When you see the green on his head, SHOOT!'

"For safety, shoot either sitting or standing. Never, if there is any way to avoid it, jump up to shoot. You may lose your balance and endanger the lives of your companions and yourself.

"Make every shot count this season. If you must indulge in sky-high shooting—and are not an expert or properly equipped—take along a good retrieving dog. He may help you save quite a few ducks."

Cowboy Philosophy

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Alpine, Texas

Which?

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which produced the events, rather than a compilation of dynasties, dates and victorious generals. Instead of telling us in detail *how* Genghis Khan and Alexander the Great fought their battles, the new historian will tell us *why* they fought their wars of conquest. And the reasons will exactly parallel the causes which led the Japanese to invade the Asiatic continent, the Italians to slaughter the Ethiopians and Hitler to shatter all the international covenants to loot Europe. From the first racial conflicts of written history on down to the present day, wars have sprung from the same background: an increased racial population wore out its natural resources and relieved the pressure within by arming its surplus men and moving in on the less depleted pastures of its neighbors.

Archaeologists tell us that this process started in the Gobi Desert and whether or not that was the cradle of the human race, the fossilized remnants of profuse vegetation and abundant animal life are all that remain to show that man once lived there in obvious abundance until depleted natural resources forced the inhabitants to seek new lands. Out of this area came successive waves of migrations which moved westward into Mongolia, India, Persia, Arabia, Turkestan, Palestine, Mesopotamia, the Nile and the Sahara, the Caucasus, the Mediterranean state and finally into what we now call continental Europe.

Buried in the dust and rubble of ages along these ancient migration lanes are crumbling palaces of kings and buried cities which once housed thriving populations, convincing evidence that those desert lands were once sufficiently productive to maintain prosperous communities. You couldn't pasture a healthy Dakota grasshopper there now on 100 square miles. Fabled lands "flowing with milk and honey," the valleys of the Ganges and Euphrates, Arabia, Persia and Babylon were not always the deserted wastes they are today, inhabited only by struggling remnants of the former hordes searching an exhausted land for sustenance for their flocks and a meager livelihood for themselves. Architects and artisans do not go off into a desert to erect such majestic designs to masonry as mark the remains of Bagdad.

What vast natural resources must have blossomed on the sandy wastes of Egypt to support the armies employed to build the Pyramids! For every stone in their vast bulk there must have been at least a hundred acres of land in full and continuous production to feed the laborers who quarried the rock and hoisted it into place. Let your imagination fill the gap between the vast operations during the building of the temples of Karnak and this flea-bitten remnant of Egypt which dips from the Nile enough water to raise a handful of rice, the per diem ration of its remaining population.

Few know that the mysterious city of

Timbuktu, a ghost town of prehistoric origin isolated by miles of arid waste in the middle of the Sahara Desert, was once surrounded by fertile fields and olive groves. Buried beneath its desert sands is complete evidence that Africa's great "dust bowl" once was as rich as the Mississippi Valley. Giant primitive forests, lakes and rivers once spread across the vast wastes of the Sahara.

Between the Gobi Desert and Mesopotamia, a thousand Genghis Khans, Attilas and Nebuchadnezzars fought for the riches which these ancient lands once produced. They wouldn't be worth fighting for now if it were not for the oil deposits (of which the ancients had no knowledge) hidden deep beneath the earth's crust. And speaking of Dakota grasshoppers, as I was a moment ago, is a reminder that grasshopper plagues and human migrations, like "the Colonel's lady and Judy O'Grady," are sisters under the skin. Both come about through populations expanded beyond the tolerance of the food supply and when they

ODE TO THE DUCK HUNTER

The poor duck hunter in his blind,
Is chilled in front and wet behind.
It's seven hours since he fed,
And twenty since he's been to bed.
It cost him near a hundred bucks,
To hide himself from silly ducks,
Which, presently, ere day dawns dim,
Will rise and hide themselves from him.

—Anon.

migrate both seek a new location where vegetation is rich and plentiful. Both leave desolation in their wake and when they have exhausted the food supply of their latest invasion they move on to another. It takes no imagination on the part of anyone who has ever seen a grain field after the grasshoppers have finished it to see there the replica of man's migration path down through the ages.

Is it just a coincidence that those once rich lands where civilization has lived the longest are all now deserts and unable to support a one-thousandth part of their former populations, or is there a lesson which we have overlooked hidden in crumbling ruins of departed civilization? Could it be that our own falling water table, dried-up springs, man-made dust bowls and abandoned cattle ranges are the early symptoms of the same blight which turned the ancient garden spots into deserts? The scientists who have read the hieroglyphics written in the sands of time say it is not a coincidence but an invariable rule. Other scientists, seeking a formula by which we may avoid such a future, have given us assurance that, taken in time, soils, vegetation and subsoil water tables can be made to persist indefinitely and yield a balanced production of life's necessities.

Fragmentary translations of ancient hieroglyphics give hints of further illuminating data on internal conditions which preceded those early tribal migrations

and resultant interracial conflicts of old. They are the only hints but they tally so accurately with known cycles of modern social upheavals that they leave room for more than a suspicion that there is a standard cycle of social and economic phenomena directly associated with the disappearance of natural resources.

Boastful praise of riches and self-glorification marked the writings and arts of newly established principalities on new and virgin lands. A note of social discontent crept into the ancient records when drought and pestilence smote the flocks. (Sounds like Kansas, Arkansas and the Dakotas.) Shepherds staged a revolution which was put down by the King's Guards. Labor complained of the high price of food. Redistribution of wealth was strongly advocated as a cure for the social discontent and was tried but whether it did any temporary good or not the cycle of events went forward as per schedule and when natural resources had been pretty well used up the governments proceeded to pick a fuss with their neighbors which resulted in a war of conquest and the pressure of population on natural resources was relieved, probably only until the new pastures gave out.

Records do not disclose whether they inflated the currency, indulged in boondoggling or talked of substituting a socialized state for the existing government, but if they did it would only make more complete the parallel between disappearing natural resources 8,000 years ago and the phenomena which have marked the social convulsions in modern times.

One of the first things that always happens when populations outgrow nature's briches is that the existing government is overthrown, usually accompanied by throat cutting and broken heads. That seems to have been standard practice down through the ages, and still is. Spain has given us a complete dramatization of this part of the cycle of social evolution during the last decade.

Boiled down to the fundamentals, the history of civilization since man was created is largely made up of the rise and fall of governments, kings and empires through the exhaustion of resources. History, therefore, in reality turns out to be the story of hungry man in search of food. Conservation is the job of so managing our soils, waters and gifts of nature on this continent of ours that man's search for these necessities shall not be in vain.

If we do neglect conservation, as history has ignored it in the past, and any considerable portion of our population does search in vain for existence, we shall have increasing poverty, social upheavals and, *in spite of our high ideals and worship of peace*, we shall have *more* wars instead of *fewer*, for wars are the spawn of empty stomachs, and empty stomachs follow, as the night follows the day, the excess of demand for natural resources over the supply. Sociologists and economic doctors should study Biology.

No one can look at this continent to-

day, compare it with the way we found it, and deny that we have ruthlessly ignored this law of Nature.

America is no richer than her remaining resources.

Hunger has, since the world began, thrown men at each other's throats. Hunger, or the threat of it, has been and still is one of the compelling forces back of racial struggles. Comparative peace reigns in all the biological world until the competition for sustenance precipitates a death struggle. America is not exempt from this rule of Nature.

After all these years of effort to find some formula of conservation which would work I am convinced that until a new generation is taught in the Public Schools man's utter dependence on natural resources, until the teachers of Botany, Chemistry, Biology and Geology emphasize the functions rather than the terminology of their respective sciences; until in fact we have a majority of the American public schooled in the fundamental principles of conservation, criminal waste will continue to reduce our heritage of natural resources. If you will begin to work soon on the youth now in the grade schools, it will not be too awfully late.

To me, Education has become the only pathway that can lead us out of the doldrums.

The Conservation Commentator of *Science News Letters*, Dr. Frank Thone, recently summed up the conservation situation about as follows: Failure to practice the principles of conservation is largely due to the failure of our educational institutions to teach conservation, and the reason for this deficiency is that teachers have not been taught how to teach conservation.

A prominent educator of wide experience recently told me that there was one great unsolved problem in pedagogy. Teachers graduated from the best Teachers' Colleges continued to go forth and teach their pupils what they had been taught by their Public School teachers. They might use the new methods of progressive education but what they passed on to the students were the concepts they had acquired in their own earlier years in school.

Thus teachers were still continuing to teach what their teachers had taught, who in turn taught what their teachers had taught them. If this be true it is only a deadly parallel to the mental habits of our whole adult population who continue to the grave living by the convictions implanted in their minds when the North American continent was new and its riches undespoiled. It constitutes a major challenge to the educators. The battle for conservation seems to me to present many aspects similar to the recent battle of little nations of Europe against the organized Axis predators. We can see now that if the small free nations had banded together to fight the invader instead of succumbing to Hitler's "divide and conquer" strategy, the story of the first years of the war would have been a

different one and victory would not be so long delayed.

In the battle for conservation we have as many organized subdivisions, each working alone as there were little nations in Europe. It was with the hope of uniting these subdivisions and coordinating their combined efforts against the wasting of resources that the National Wildlife Federation was proposed and its organization attempted. Some such device for unification seems desirable in the extreme needs of the years to come. Whether or not it succeeds depends on the willingness of the public to give the matter their attention.

The Golden Age

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for one more mess of baked plover. If you get another mess, you will have to break a law to do so, for they are protected now in both their Northern and Southern flight. Shooting plover in those days, was one of the greatest of old-time sports. All you needed was a few shells and a "gun-broke" horse hitched to the old family buggy and the limit was yours.

Then came Summertime and the old swimming hole. Those holes had a way of being close to somebody's watermelon patch, and in those days there were no laws against a boy sneaking a melon or two. He might get shot at, but in that day most any boy could run through a barbed-wire fence with a melon under each arm and never get a scratch. Whether they were ripe or green, he ate them, for then a boy's stomach could handle any freight shipment it might receive.

Summertime also meant fishing weather. About once a week Dad would let us have the old family horse and buggy. We "dug" plenty of worms the day before and by the time the roosters began to crow, we were up and boiling coffee and frying side-meat. Soon we would be off to the old mill to mix it with the big old goggle-eyed perch and channel cat and what we caught, we "strung," for there was no law either on size or limit and there was no game warden south of the Mason and Dixon line. Part of our catch, we cooked on the bank of the creek and any old boy could eat a dozen big perch fried in the brown. The black coffee would keep us awake most of the night, but we had the pleasure of lying there on Mom's feather bed and thinking back over each event of the day and remembering how hard the biggest fish pulled when we hooked him.

Summertime also meant "chunking wasp nests" on a Sunday afternoon.

Chances were, some old boy would go to church that night with a closed eye or a "swelled up" jaw and smelling like Lightning Liniment, but he had had a good time and got his wasp nest with the same dash and courage that our boys show in cleaning out the Japs today. That is why the people of other nations can't lick American boys. They just won't quit and when they go in to clean-out a snake or pole-cat den, they always finish the job. They may come out with a lot of dirt on them and smell a little rank, but they come out conquerors.

Space will not permit me to go into the rare sport we had in the Fall and Winter months, such as threshing the pecan trees that "hulled early," stringing black-haws and "snaring" and "grabbing suckers" in the clear holes when there was no wind to ripple the surface of the water.

It was a continuous round of pleasure, from season to season and the only shadow looming ahead of us, was "going to work," settling down, getting married and becoming old men when we reached the age of thirty.

Today, when one of those gray haired boys goes fishing, he doubtless goes out on some artificial lake, chugs around for a few hours in a motor boat and makes a "water haul" by catching two ten-inch bass and three catfish under seven inches. He comes in late, the madame bawls him out for being gone so long and all he can show for his sport is a blistered nose and the loss of Seven Dollars that the trip cost him. September comes and he decides to go out and kill a "mess of doves." He buys some high priced shells for the old gat, climbs in his car and lights out for the dove territory. He arrives and the telephone wires are loaded with doves, but the law says he can't shoot. So he gets out of the car and crawls through the fence; he gets one shot and out comes a farmer yelling, "get out of there, I don't allow no hunting on my premises." He gets back in his car and drives on another mile or two. Then he sees a fat old dove sitting on the dead limb of a tree. In the back of the car he has his favorite 22 rifle; nobody is in sight, the 22 won't make much noise, so he takes a chance and cracks down on the bird and drops him with a clean shot. He's thrilled with his marksmanship and the old 22, but as he gets out of the car to retrieve the bird, a state game warden steps out from nowhere and says "Mister, that's going to cost you plenty of money for you broke four laws when you shot that bird. You

shot from your car, you shot across the highway, you used a 22 and when you crossed the county line two miles back, it put you in the South Zone and the season is not open there yet." The next day he pays off to the tune of Seventy-Five Dollars for a bird that was so plentiful when he was a boy, that he could shoot anytime, anywhere and with any kind of gun without breaking a law.

In writing the above, does this mean that the writer is against our game laws? A thousand times NO! I am for every sensible game law that is on our statute books and had we old timers been as careful when game was plentiful, maybe we would not have such a scarcity today. The boy of tomorrow will never see as much wild-life as some of us have seen, but let us conserve what we do have and give him a chance at the sport that was so dear to us.

Electric Fence

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of a regular fence. This will turn horses and cattle very successfully but the deer goes under or over with slight chance of touching the wire.

But a low wire five or six feet away from the regular fence is something different. It is an obstruction that attracts attention and arouses the curiosity of the deer. It is in his way if he wishes to jump over, so he is apt to touch the wire with his nose but if he does not see it in the dark he is almost certain to stumble onto it just before he makes the attempt to leap over, as the wire will be located just where the deer makes his stand for his jump across the goal line. If he touches the wire the amazing experience is one that the deer will never try to repeat. The voltage kick carries no injury but no deer once shocked and panic stricken would ever believe it to be harmless.

Ducks Fly North Before Going South

Many young ducks fly north in the fall before starting their southward migration! That is the conclusion reached by Tom Main, General Manager of Ducks Unlimited, Canada, as a result of wildfowl banding and trapping operations conducted in North America's great duck breeding areas of western Canada, and reports of young ducks encountered in the fall far north of the breeding grounds.

Juvenile ducks banded in southern Alberta in June have been recovered in September from traps at points up to 600 miles to the north, Main declares. Other young ducks have been shot by Indians and trappers during the fall a

thousand miles north of where they were hatched.

This pre-migration northward shift is credited to a hunt for food. It is pointed out that while the ducklings prefer to remain in the alkali lakes of the prairie areas during the late spring and early summer, when these waters swarm with minute aquatic animal life, the more northerly lakes attract them from mid-summer on with an abundance of food suitable for them to feed on before making the southward flight to the United States.



WHEN the duck bag limits were announced by the Department of Interior many eyebrows were arched at the regulation permitting a hunter to kill 25 coots a day during the open season, or to have 25 coot in his possession at one time.

Eyebrows were arched because most Texas duck hunters don't look upon Mr. Coot as a game bird. He's a bird to let alone, especially when the air is filled with soaring mallards and honkers. But now and then a coot gets mixed up with some ducks of better culinary reputation and finds his way into your bag. Up to now, Mr. Coot has been tagged for a friend or to some one you might owe a little *do re mi*.

But it is possible that Texas hunters aren't giving Mr. Coot his dues. Perhaps Mr. Coot isn't the poorest eating waterfowl. Perhaps he's got some latent qualities that are pretty good after all. However, that is, and always will remain a matter of personal opinion. But the Fish and Wildlife Service thinks Mr. Coot has some mighty good qualities and just to prove it, the kitchen experts of the Service got themselves some coot, went into an experimental kitchen, and came up with these recipes.

The first thing you must do in preparing Mr. Coot for an honored place on your table is to skin him and remove all the fat. This is to remove the strong taste that one usually associates with Mr. Coot. Use only the breasts, legs, liver and gizzard. And be sure to soak 'em in a 50 per cent solution of vinegar and water. That's to eliminate the wild taste.

So, with the coot skinned, the fat removed, and the breasts, leg, liver and gizzard saturated with the wild taste removing solution, you now are ready to proceed to your kitchen and, surrounded by the implements of the chef's trade, embark upon one of five culinary courses:

No. 1. This recipe is for those who like a little gamey flavor. Roll the salted and peppered pieces in flour and fry in a skillet of deep hot bacon grease. Cook through and serve.

No. 2. This is a Dutch Oven recipe. Roll the pieces of coot in flour mixed with sage, salt and pepper. Brown in a skillet with bacon grease. Place in a Dutch Oven or a heavy pot in the oven. Sprinkle well with chopped onion and garlic, add a very small amount of water and simmer for an hour or more. A good sauce may be made of flour browned in a skillet to which is added butter, chopped parsley, green peppers, Worcestershire sauce, a touch of rosemary, and a very small amount of brown sugar.

No. 3. This is coot stew. Cut in pieces and place in enough cold water to cover. Add salt, pepper, herbs as desired, small amount of Worcestershire, raw potatoes, onions and carrots cut into small pieces. Stew slowly until the meat is well done.

No. 4. This is known as Coot Hassenfeffer. Breasts and legs of two or three coot soaked for two days in equal parts of vinegar and water to which is added one large sliced onion, cloves, bay leaves, salt and pepper. At the end of two days remove and brown in hot butter, turning often. Add gradually some of the sauce in which the coot was pickled, let simmer until tender (about 30 minutes). Just before serving stir in a cup of sour cream.

No. 5. This is A La Coot Gumbo. Place the pieces from 3 coots in a kettle with enough lightly salted water to cover. After simmering for about 2 hours, add 1 quart of either fresh or canned tomatoes, 1 large onion chopped into small pieces, and 1 or 2 sprigs of parsley. Brown $\frac{3}{4}$ pound of diced cured ham in a skillet and add it to the kettle. Wash, stem and cut into $\frac{1}{2}$ -inch slices 1 quart of okra. Brown this in the ham fat and add it also to the kettle. Continue to cook slowly for another hour or two until the coot and ham are tender and the sauce has a fairly thick consistency. Add salt to taste and a flash of cayenne. Serve with flaky boiled rice.

HOW TO COOK VENISON

Adapted from Michigan Extension Bulletin 253, VENISON FROM FOREST TO TABLE.

Venison is among the most highly prized of all wild game. If properly dressed and cared for in the woods, it is free of objectionable and so-called game flavors. Unpleasant experiences with venison on the table are usually due to lack of care before it reaches the kitchen. However, good cooking is important in making venison appetizing—and it can be as good as the best meat from the butcher.

It should not be necessary to make any attempt to conceal the flavor of venison. The characteristic flavor seems to be concentrated in the fat and if strong, trimming away excess fat will help. However, venison is a rather dry meat and is improved by addition of suet, butter or other fat when using dry

heat methods—roasting, broiling and frying.

The standard methods of cooking beef and lamb are most successful for venison. Even though you do get a deer that is tough or has a strong flavor, there are ways of making it palatable and appetizing. Recipes and methods for cooking tough cuts are given, and use of bacon, vegetables and fruit juices is suggested to impart a different flavor. Spices such as bay leaf, thyme, garlic, savory and the like may be added to suit your taste.

There are two general methods of cooking meat: *Dry Heat* for tender cuts and *Moist Heat* for the less tender cuts. Meat recipes are all variations of one method or the other. There are any number of variations and seasonings that can be used to meet the individual taste.

Dry Heat Methods (For Tender Cuts) ROASTING (round, loin, shoulder)

1. Season with salt and pepper.
2. Place on rack in uncovered pan, fat side up.
3. Do not add water—do not cover.
4. Extra fat may be added to venison. Bacon strips or beef suet may be laid across the top.
5. Roast in slow oven (300°-350° F.), allowing 20-25 minutes per pound. Turning the roast aids uniform cooking.

BROILING (steaks and chops)

1. Preheat the broiling oven.
 2. Place steaks or chops on the broiling rack with top surface 3 inches below source of heat.
 3. Broiler door should be open unless directions of range advise otherwise. Lower flame or heat if meat smokes or throws grease into flame.
 4. Broil on one side until nicely browned and then turn to other side. For a 1-inch steak, the time required will be 7 to 10 minutes for each side.
 5. Season with salt and pepper, add butter and serve at once.
- (Try broiling in your fireplace over a bed of glowing coals).

PANBROILING—frying (steaks and chops)

1. Heat a heavy frying pan until it is sizzling hot.
2. A little butter added to the pan improves the flavor—otherwise rub the pan with a little suet or small amount of fat. Place the meat in the hot pan.
3. Brown both sides—turning only once.
4. For thick chops or steaks reduce heat after browning to finish cooking clear through meat.

Moist Heat Methods (For Less Tender Cuts)

BRAISING (shoulder, neck, breast)

1. Season with salt and pepper, rub with flour.
2. Brown on all sides in hot fat.
3. Add a small quantity of water (about one cup).
4. Cover closely.
5. Cook *very slowly* until tender. Turn the meat occasionally. Time, usually two to three hours.

STEWING (shoulder, shank, neck)

1. Cut meat into cubes about one inch in size.
2. Season with salt and pepper, sprinkle with flour.
3. Brown on all sides in hot fat.
4. Cover with boiling water.
5. Cover kettle tightly and cook very slowly until tender. Do not boil. Add vegetables just long enough before serving time that they will be tender.

Miscellaneous Recipes

VENISON POT ROAST WITH VEGETABLES (shoulder, rump, round)

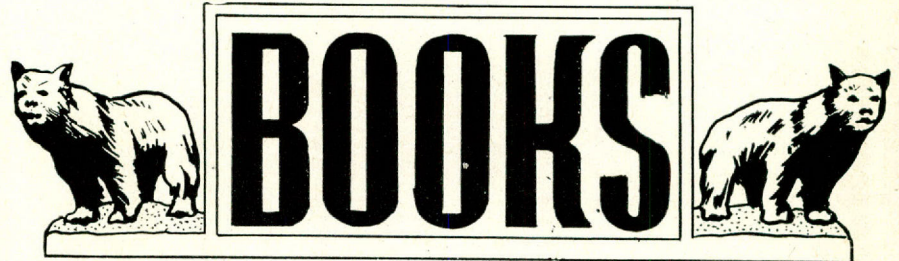
- 3-4 pounds of venison.
5 whole carrots.
5 whole potatoes.
5 whole onions.
Turnips and celery may also be added.
Dredge meat with flour, salt and pepper, and brown in fat. Braise the meat for two or three hours over a

very low heat. When the meat is tender, add the vegetables and cook until vegetables are done. Make a gravy of the liquid in the pan and pour over the meat and vegetables.

VENISON SWISS STEAK (tough steaks)

- 1½ pounds round steak.
3 large onions.
1 medium stalk celery.
1 cup tomatoes.
2 tablespoons Worcestershire sauce, salt and pepper.

Steak should be about 1½ inches thick. Dredge with flour and season with salt and pepper, then brown in fat. When brown on both sides add the other ingredients. Cover tightly and cook in medium oven (350° F.) or over low flame on top of the stove until tender (about 1¼ hours). Remove meat to platter and make a gravy from drippings in the pan. Serve with baked potatoes.



The Hiker's Handbook by Douglas Leechman. 220 pp. W. W. Norton & Company, N. Y., 1944. \$2.50.
Reviewed by Gordon Gunter.

The author is a member of the staff of the National Museum of Canada and has been for many years an enthusiastic and experienced hiker. His book, although specifically for hikers, might well be addressed to all people who spend any time outdoors. Hunters, nature lovers, and people who work in the open might all read it with profit.

In the first chapter the author gives hints on walking. According to him, most of us, especially city dwellers, do not do it properly—at least in the woods and fields. He tells how it should be done. In succeeding chapters he tells what to wear, so as to be both comfortable and conventional, what to carry along on hikes of various lengths, how to arrange your packs, and what to do about sleeping out-of-doors. Much of the book is written in manual form, with

headings at each new topic. The author has much interesting and sensible advice to give and it seems to the reviewer that even those who seldom or never leave their homes will find the book interesting reading. There is a good discussion of maps and compasses. There is a chapter entitled "Lost in the Woods," which not only takes up what to do when lost, but how to avoid getting lost and how to prepare for it beforehand.

In "Your Health and Other Trifles" the writer discusses the care one should take of himself in the field, as well as what to do in case of accidents. Several topics not ordinarily found in first aid books are discussed. Food is discussed in a separate chapter and another is devoted to woodcraft and trail lore.

Some people take to wandering in the wilds like a duck takes to water, but some of the others seem to never learn. The author advises short afternoon rambles for beginners to practice on, so as to become accustomed to clothes and



paraphernalia and to detect any changes that need to be made, before more strenuous hikes are undertaken. Weekend hikes should be undertaken next. After that sort of a shakedown longer trips can usually be undertaken. For the best enjoyment of a hike the writer says the hiker should have an objective, but should not make the schedule too rigid. In other words don't make a job of work out of it. The final chapter is entitled "The Hiker and the Law." It should interest any one who stays outdoors for any purpose whatsoever. The book ends with a rather complete index.

There is a great deal of specialized information summarized in this little book by an expert in the field. It is of value to all people who traverse the countryside on foot or who camp out. There is also a chapter on going for walks in the city. It is well illustrated by a number of diagrammatic drawings.

Conservation in the United States
by A. F. Gustafson, C. H. Guise,
W. J. Hamilton, Jr., and H. Ries.
2nd Edition. xix 477 pp. Comstock
Publishing Co., Ithaca, N. Y., 1944.
\$4.00. Reviewed by Gordon Gunter.

The authors are all connected with Cornell University and are specialists in the diverse fields of soil technology, forestry, zoology and geology. They constitute an excellent team for consideration of the complex subject of conservation, which is factually connected with several of the specialized fields of knowledge. As the authors state in the introduction, the term conservation has an extremely broad significance, but they are concerned with conservation of waters, soils, grasslands, wildlife and minerals. The natural resources of this country are the sole material sources of its wealth and in all of its broad ramifications the conservation of these resources is an important aspect of conservation of the nation and its human resources. Thus the importance of the subject which the authors set out to discuss is difficult to overestimate in almost any terms. It is of vital importance to everyone.

To the readers of this magazine, who are probably more interested in conservation of the wildlife resources of Texas and the nation than any other group in the state, it is a book of first rate importance.

In the reviewer's opinion the writers have done their task exceedingly well and the reader will find the book all the more palatable because it is a fine example of the printer's art. The printing is large, the binding and paper are of excellent quality and the text is lavishly illustrated with fine photographs.

In the introduction a short history of the important steps in the conservation movement in the United States and an outline of the scope of the text is given. The book is divided into four parts. In part I, Conservation of Soil and Water Resources, conservation and use of water resources are discussed. Facts concerning formation of the soil, the deple-

tion that has occurred and the ways of maintaining soil productivity and preventing its loss are presented. Part II takes up conservation of the forests, parks and grazing lands. It shows how depletion has taken place, and outlines a constructive program for future action. Part III deals with wildlife, and fisheries. Their great, but often overlooked, economic importance is emphasized. Factors responsible for decline and suggestions for minimizing the destruction are treated. Part IV takes up the conservation of mineral resources.

This book is a general introductory survey and a specialist in any phase of conservation will probably find that treatment of his subject is necessarily brief. My observation of salmon streams in California and studies of the situation in general have convinced me that the salmon fisheries must perforce disappear if the construction of power and irrigation dams is continued. FISH screens are inadequate and fish ladders are usually a joke. Yet it is still maintained by wishful thinkers, and possibly some who doubtless know better, that fish ladders, fish screens and salmon hatcheries can take care of the situation. The shouting continues, as the salmon production of the northwestern United States continues to decline precipitously, and will probably go on until the salmon run is over—when the exponents of these irrational theories will be embarrassed enough to stop, I hope. This shouting and dust raising has confused the authors, who are not at fault, since they are not specialists in the field, and they make the statement that it by no means follows that salmon and power cannot be had from the same river. That statement is unfortunate for the whole history of salmon fishery contradicts it. Fish ladders and lifting devices unless carrying more water than engineering needs can permit will transport a small percentage of the salmon over dams—a sort of living museum so to speak—but little more. The water resources of our northwestern rivers are worth more than their fish resources and it might as well be admitted outright. However, this is a small detail in a book that includes a great deal of important information and presents it well.

Maine Defends Fish Story Title

Maine, long considered the champion fish-story state, has been goaded into defensive action by weird tales from other parts of the country. In a bid to retain the championship for his state, Earle Doucette, demon press agent for the Maine Development Commission, passes along the following:

"Al Grover of Moosehead Lake says he found a five dollar bill in the stomach of a landlocked salmon he was cleaning. I believe Mr. Grover's story implicitly, because I had an even more startling experience. Some years ago, I fished Rangeley Lake. While I was leaning over to net a big trout, my watch fell into the fish's mouth. The trout swallowed the watch just before he shook himself loose and escaped.

"The following year I fished Rangeley again and caught a fish looking just like the watch-swallower. Eagerly, I slit him open, but instead of the watch I found a pawn ticket! Evidently the fish had run out of funds during the winter."

Pick up the marbles, Earle!

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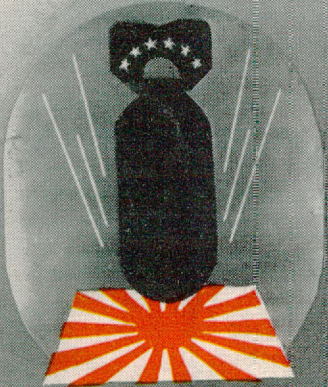
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