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The Utah Juniper, Volume 3

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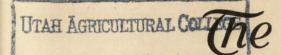
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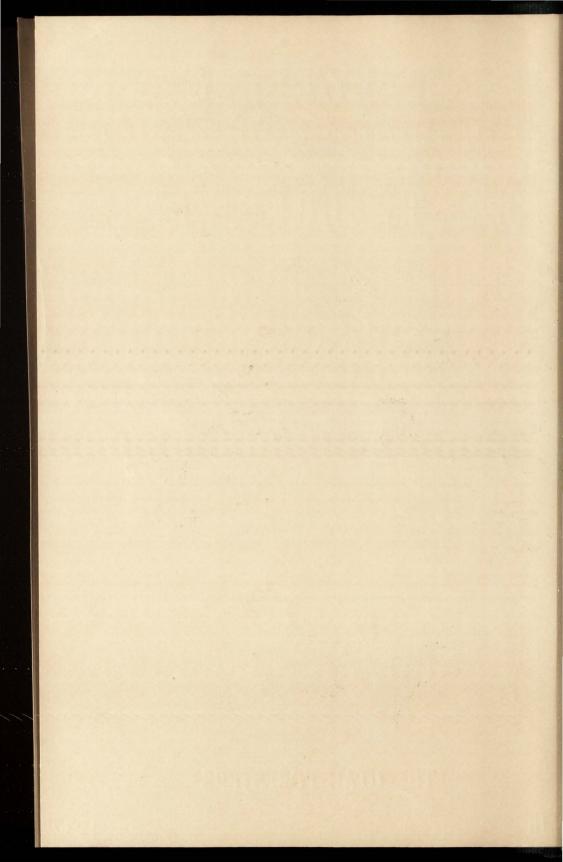


DEPARTMENT OF STRANGE MANAGEME

TAHJUNIPER

THE UTAH FORESTERS





Published by The Utah Foresters Utah State Agricultural College Logan, Utah 1932

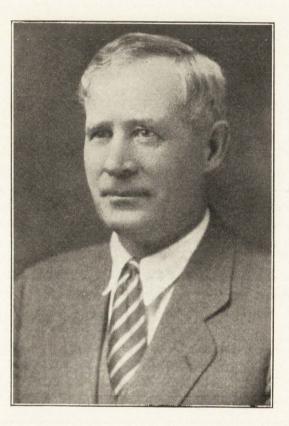


(Courtesy U. S. Forest Service)

"And I have heard songs in the silence too noble for words to express."

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Dedication

To R. H. Rutledge, who has extended his help and cooperation to the forestry department of the U. S. A. C. throughout its development, we, the Utah Foresters, dedicate this, the third volume of the Utah Juniper.

Choosing a Profession

By Regional Forester R. H. Rutledge.

"What are you going to be when you get big?" is the question most frequently asked of the boy as soon as he reaches an age when he begins to observe the life of people around him. His answer is usually influenced by boyish fancy for a locomotive or an airplane, or from seeing a cowboy, or by some such incident. Later on he may be influenced by what "Dad," or some other person who catches his boyish fancy or admiration, does. Throughout the high school period the same question persists and is just as puzzling to the boy himself and to father and mother who anxiously endeavor to give an intelligent answer. Parents who may not have had many educational advantages seek the advice of people who to them appear to have made a success in life. During this period the boy may begin to exhibit talent or characteristics in some field which may serve as an indication of inclination or ability, but the answer is still vague and indefinite.

Arrived at the threshold of college and for some time thereafter the same question is still to be settled by many. Advisory agencies have been set up in many schools to assist students in making a decision and in selecting the work best suited to them. It is here, however, that men take steps to become lawyers, doctors, preachers. engineers, and some foresters simply by accident or chance.

It is here that time should be taken by some one to assist the student in analyzing the work of any profession, and in determining as far as possible whether or not the student is adapted to the work, and whether or not he will be successful and happy in it. For example, let us attempt to analyze the profession of forestry. The word "forest" carries a meaning and a hint of space, of mountains and canyons, of hills, of lakes and rivers, of somber woods and of open ranges. It carries a suggestion of the trail and the camp, of the back-pack and the pack horse. It brings visions of the saw and the axe, the peavey and the scale rule, the traverse board and the transit, of the saddle and the rope. It brings a glimpse of rain and snow and of mud. of heat and thirst and forest fires. It brings a realization of hard jobs which must be done, of blistered hands and tired muscles, and rough surroundings.

To be a successful forester, there must be a love for the forest and for all it involves, a willingness to perform hard work under all kinds of conditions, and some of the old-time lumber-jack pride in feats of strength and endurance. It makes necessary a sound body and a determination to overcome difficulties.

The results of forestry work either in timber or range are not immediately apparent. Certain silvicultural practices may take years or even generations to show anything tangible in the way of results. Likewise, improvement or deterioration of range lands shows up very slowly.

Improvements, roads, trails, sanitation, and other work extend over long periods of time. These conditions make long-time planning necessary.

The successful forester must, therefore, have vision and the tenacity of purpose to keep driving for future results and the patience to overlook lack of immediate achievement.

Almost all forestry work, either state federal, or private, directly affects the public, and is a public service in many ways. This makes it necessary that the public be kept informed, and that many complaints and misunderstandings be listened to and smoothed out. A forester must expect to acquire and to exercise the greatest amount of tact and to be answerable in a great measure to the public. An ability to deal with the public is a necessary requisite.

This involves honest thinking, square dealing, refusing to indulge in sharp practices, and personal traits that are beyond reproach. Forestry dovetails into public problems in so many ways that one in this profession must gain and hold the confidence of the community. Without this high esteem he would soon find his path permanently blocked.

Policies formulated and put into effect are far-reaching, both as to area and as to time. Standards as to quantity, quality, and character of work are a necessity in the conduct of the work of an organization.

The individualist has his difficulties in organized work. The forester, as a general rule, must be an organization man, recognizing his place in the organization, willing to subject his individual ideas and prejudices to the general policies, standards etc., set up for the organization.

Forestry is essentially a field job. It is in the field that the work is to be done. Irregular work hours and absence from the home station are a part of a forester's life. Swivel chair forest jobs are few (Continued on Page 38.)

The New Home of Our Waterfowl

By Geo. E. Mushbach Superintendent, Bear River Migratory Bird Refuge

Outstanding in a system of migratory wildfowl refuge being created by the United States Government, is the Bear River Migratory Bird Refuge situated in Utah. It is located in Box Elder County, west of Brigham City at the delta of Bear River on what was once the old lake bed of Great Salt Lake. Administration is under the U. S. Department of Agriculture, Bureau of Biological Survey, local supervision being directed by a superintendent whose office is located in Ogden, Utah.

Much of the area, embraced within the refuge boundaries, is commonly known as the "Bear River Marshes," which for many years was a famous waterfowl resort, attracting vast hordes of water birds of many varieties at certain seasons of the year. During the period when market hunting was legalized the commercial shooter found it a fertile territory. Residing in that section today, are many who shot for market. These old hunters tell well-nigh unbelievable tales of the number of wildfowl shot day after day and of the myriads that then frequented the marsh.

In contrast with the picture of abundance there was also a darkened view. Some twenty years ago reports of a mysterious malady among waterfowl is recorded. Early history indicates that some birds died of the disease, but it does not seem to have reached serious stages until about 1910. After that period it reached the proportions of a national calamity and from 1913 to 1916 caused an investigation by Bureau of Biological experts in an effort to determine the causes. It was estimated that during a period of 15 years millions of ducks died from the so-called "duck disease." Incidentally it may be stated that recent developments, as a result of continued research by Bureau scientists, have quite definitely established the nature of the disease. It appears now that the malady, formerly attributed to poisoning by alkaline salts, is a bacterial disease characteristic of botulism. Those sections of the marsh formerly most seriously affected are now in the Refuge. One of the principal benefits anticipated by the creators of the sanctuary is to bring about improved conditions which will abate to a large degree danger of recurrence of the malady. The impounding of fresh water with resulting greater depth to it will, it is believed, nave the desired effect and greatly reduce the enormous toll taken annually from the duck visiting the marsh.

The Bear River Refuge is an important link in the chain of waterfowl sanctuaries contemplated by the Federal Government throughout the United States. Its purposes, in common with similar projects, are to provide for waterfowl and other acquatic bird life suitable and desirable areas for resting, nesting, and feeding where the flocks may enjoy complete protection; where they may propagate and live unmolested under natural conditions throughout the appropriate seasons.

The establishment of the Bear River Migratory Bird Refuge was authorized by an Act of Congress on April 23, 1928, and an appropriation of \$350,000.00 was authorized.

Necessary engineering work and land acquisition having been previously carried forward, the first construction contract was let in July 1929. From that time on until September, 1931, when the work was completed, the vast construction program progressed steadily. Two draglines were in operation during part of this time and for the most part worked day and night building up the great earth embankments which form the outer dike.

The dike system now has a total length of 29 miles. An outer dike 20 miles long forms a barrier separating the Bear River delta region from the waters of Great Salt Lake. An additional 9 miles of cross-dikes divide the interior marsh into five units, which form that number of fresh water lakes.

The combined dikes contain 1,020,000 cubic yards of material, are approximately 6 feet high (3 feet above high wated level), and more than 100 feet through at the bottom. The dikes are sloped up to a foot crown and are constructed with sloping sides to secure beach action of the waves, thereby preventing excessive erosion.

At intervals of from 2000 to 4000 feet, large wooden spillways have been placed in the dike to permit the regulation of depth of water in the units. Surplus water will flow through these spillways and then flood the vast area of old lake bed between the outer dike and the Bear River Bay of Salt Lake.

When inundated by fresh water the outside area forms excellent waterfowl territory. It is estimated that this outside area will be flooded to the extent of some 18,000 acres. The flooded area inside the dikes will consist of approximately 28,000 acres, bringing the total flooded lands within the refuge boundaries to 46,000 acres.

The flow of Bear River, the chief water supply of the project. is controlled by a large concrete dam at a point just above where the delta is formed. The control structure is provided with 14 radial gates each 16 feet wide. By means of this control the water is distributed as desired to the two west units, and by holding back the flow it is forced upstream as far as 13 miles to supply the other three units.

Barrow pits on each side of all dikes furnish a waterway so that the entire project can be patrolled by boat. In addition to the barrow pits there is a system of canals 8 miles long to provide for distribution of water to the various units, and which also serves for boat passage It is also planned to construct a roadway on top of the dikes, making inspection and patrol possible by motor vehicle.

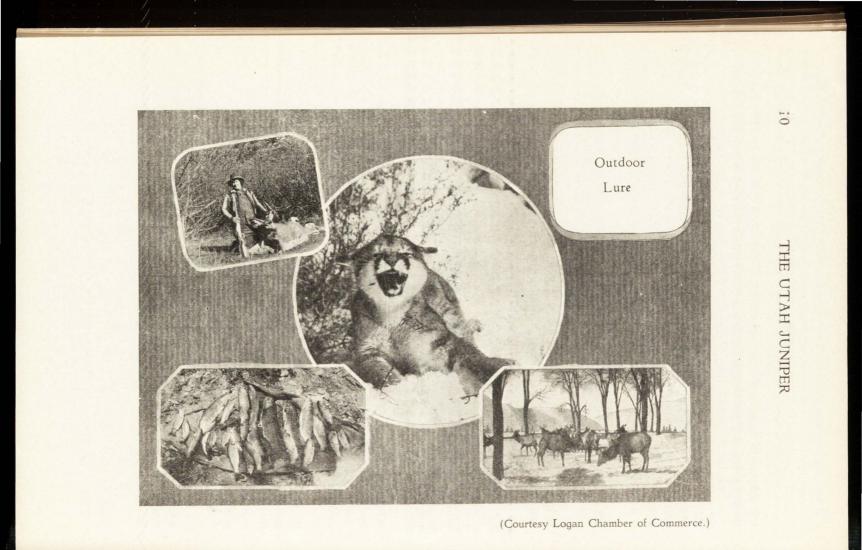
The present net refuge area acquired is 53,566.43 acres. Of this amount 15,860 acres were purchased outright from owners: 36,632 acres were government land set aside by executive order for refuge purposes and the rest was acquired through land exchanges with various holding agencies, including the State of Utah. The total area may be increased somewhat when the boundaries are definitely fixed.

The value of the refuge as a wild fowl sanctuary can be realized when it is stated that 84 varieties of water and marsh birds are recorded from this region. Of this number 61 species may be classed as common and abundant, most of the others are rare, and a few are evidently accidental visitors.

Twenty four species of wild ducks are recorded for the Bear River region. Sixteen of this number are common visitors, six are rare, and two merely constitute a record. The ducks classed as abundant and common are American merganser, red-breasted merganser, mallard, gadwall, baldpate, green-winged teal, cinnamon teal, bluewinged teal, shoveler, pintale, redhead, canvasback, lesser scaup duck. American golden eye, bufflehead, ruddy duck.

Those classed as rare migrants are booded merganser, greater scaup, Barrow's golde neve, white-wing scoter, surf scoter, and old squaw: while the black duck and wood duck are of such infrequent occurrence as to only provide a record.

Of the goose family the Canada goose. Hutchins goose, snow goose and whistling swan are common and abundant. The Ross (Continued on Page 39.)



Creating New Wants

By Dana Parkinson, Assistant Regional Forester.

In 1900 there were 168,000 students in college in America. Now there are over 800,000. When a man left forest school a few years ago, there was a place waiting for him. Most any student who exposed himself to the hammering of his professors was offered a job.

There are now many forest schools: the turnover in the Forest Service has dropped; there is more competition for jobs, and the jobs are more exacting. The relationship of forestry to society and to industry is changing so rapidly that no one can keep up with, to say nothing of directing, the scheme of things in forestry unless he is willing to acquire more information than the conventional forestry courses offer.

Almost overnight this nation has changed from a policy of expanding agriculture, expanding production, etc., to a policy of limitation; changed from supporting the anti-trust law to demanding legislation permitting combinations in restraint of trade. The nation is just as likely to change its forestry policy as its agricultural or economic policy.

Some students of forestry may have thought they were to get an easy berth—just take what was handed out to them by their school, then apply it in their profession the rest of their days. They will either be disheartened to learn different or they will tighten up their belt another notch and see more interest, more excitement, more combat, and more opportunity for exercising latent abilities, than if they were in a state of stability with fixed or mechanical grooves to follow.

More efficient man-power and machinerv release more men from manual labor. Robert Millikan, one of the greatest minds in the country, says the solution of unemployment is more education. More of man's life devoted to study means greater progress in research. sreater perfection of wood-using industries, and less waste in the woods: all of which means more complete and closer utilization with less acreage required for the same production. Increased use of steel, cement, composition shingles, synthetic lumber, and wood preservation will hold in check. if they do not reduce, the demand for sawtimber sized trees. There is also the possible manufacture of paper from inferior species or even from cornstalks. Either or both would lessen the drain on forests. We know the South and the East can grow timber two or three times faster than can the Intermountain Region and that cut-over lands are not all as idle as we used to think, but are coming back to young growth. The agricultural economists tell us that the good farm land now under cultivation can raise all the agricultural crops we can consume for fifty or one hundred years and possibly for all time, as our population curve is flattening out, with restrictions on emigration and with smaller families. The Secretary of Agriculture is already advocating conversion of marginal crop lands into forest as a cure for over-production in agriculture.

Fire protection on public lands is becoming more and more efficient. On private lands it will also become more efficient or the land will become delinquent and revert to public ownership and receive protection. This means accumulation of dense stands that should be thinned out thus furnishing more wood for use; otherwise it will be wasted by nature.

Better control of insects and disease will also increase net growth. How much longer will the nation consume faster than it produces wood? In short, the bigger problem may soon be, not to produce more, but to increase the use of forest products before they decay.

We are told that right now forty-eight per cent of our working people can produce more foodstuffs and raw materials for clothing than all can consume; that fifty-two per cent of us live in cities of over 2,500 population; that the energy of more than half our population is therefore available for supplying *new wants*, such as free wheeling, tone control for radios, electric refrigerators, air conditioners, etc. But still this half cannot keep employed, and the work of fewer and fewer people is needed to satisfy our present needs, unless new wants are created.

Foresters have the same opportunity as any other industrial or professional men to create new wants, but with this advantage. The raw materials with which to work are furnished free. This has its dangers lest foresters do not feel the same urge to get returns as they would if the raw materials had to be acquired by their own money and labor. This game of creating new wants may appear inconsistent with the forester's line of thought and his training. But if rerlacing obsolete ideas means inconsistency, inconsistent he must be. For example, foresters once had control of many outsanding examples of nature's handiwork—those so-called inspirational features. They did little but protect them. Along came another agency which created a new human want (or stimulated an existing one) and learned how to supply that want. The result is obvious.

Right now, thirty-two million people seek recreation within the National Forests. The want is already created. The problem of sanitary engineering for forest playgrounds is tremendous. The art of making camp-grounds attractive and keeping them so has scarcely begun, yet someone must do this or the camp-ground will vanish.

More education, which Robert Millikan suggests as a cure for economic ills, need not all be in the schoolroom. Nature study, combined with forest recreation, offers a broad field for development which should have strong appeal to the public. There is more unemployment and leisure time in winter than in any other season, and foresters have the wherewithal to supply a new want in winter sports; yet little has been done.

Here is the opening. Instead of stepping into a government job with income assured and policy all laid out, foresters will have to be more resourceful than ever; have to be observing enough to keep ahead of the time; to pit their ability to create new wants against that of other professions. Foresters may be willing to defer to the auto industry, the radio or the frigidair people in creating new wants, but surely if the cosmetician and the chewing gum producers step into this field and make a success of it, professionally trained foresters should be even more successful. Of course, foresters will have to protect watersheds, raise forage, and carry on the recurrent work of protection, etc., but this should soon be largely systematized on the National Forests, at least.

A president told his students, "the college which is fearful of mistake in policy, withers intellectually and dies spiritually, even more promptly than does the college suffer grevious harm which is guilty of mistaken boldness." The same things apply to the profession of forestry. If you merely follow the footsteps of European foresters, of early-day foresters in this country, or of present-day foresters, or even take the teachings of professors as the last word, five years hence you may be a back number, an obsolete piece of equipment. Absorb and use the experience of the past, to be sure, but an automaton or a robot cannot expect to be a forester. Forestry will become a stagnant or a virile profession accordingly as its exponents dream of the past or see visions of forest land fitting into the life and needs of society more aggressively than ever before. Forestry must adjust itself just as fast as the whirl of civilization warrants.

Youth differs from age in that old age dreams dreams of the past, while youth sees visions of the future. One can be a dreamer

at thirty or see visions at eighty. As for the prospects for forestry, there is a bull fight right now in all professions and industries. Forestry has not escaped. But, there are going to be more phases of forestry. There is going to be more forest land under management. There is going to be more grazing land under regulation. There is going to be more insistence upon watershed protection than ever before, and there is going to be more need to create new wants and supply them. These wants may be new uses for wood, better game management, supervised hunting, development of recreation, or something else. After the wants are created foresters must be able to supply them better than any one else. Will the foresters be dreaming at thirty or seeing visions at eighty? It is up to you.



(Courtesy U. S. Forest Service.) A SYLVAN RETREAT

Gila Bill

By Charles Michaels, '33

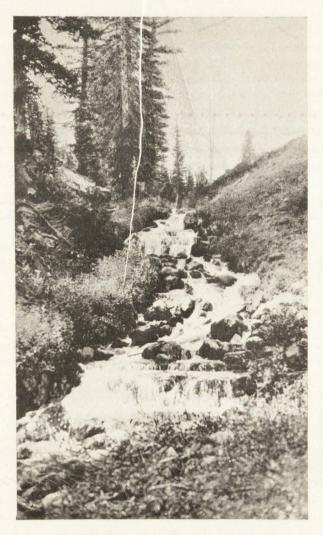
Where wuz I born? Never mind now stranger where I wuz born. I come onto this world a man, a beard on my face, and hair on my chest. What's more, old though I be, I can whip any man what doubts my word.

It wuz back in the good old days, long before your time, when I first met Maud. I wuz a young blade then, and kind'a wild. She wuz a kind and gentle creature, and we become very close friends. One dark night I wuz tempted, and stole her from her mother. You see it wuzn't very dangerous in them days to steal a horse. Besides, I wuz headin' "West" and didn't care. Oh, I wuz a dashin' young buck in them days. Well, Maud and me traveled west, and by the time we crossed the "Big River" we wuz sure pals. I'm tellin' ya, stranger, that Maud horse had more brains than—well, than you! Even though you is an egicated man.

I mind how I used to talk to old Maud by the camp fire at night. Why, stranger, that horse would talk back just like a human bein'. Then I begun to learn her things—above all, obedience. It wuzn't more'n a month 'fore she would stop when I hollered ''Whoa'', no matter where she wuz 'r what she wuz doin'. Then one day she had an opportunity to prove her sterlin' qualities. We wuz bein' pursued by a band of a thousand Indians, and due to Maud's endurance we stayed ahead of 'em fer six days. On the seventh day, due to carelessness, we wuz cut off from escape by the Indians behind us and a precipice all around us. Watin' 'till they wuz 'most on me, I calmly rode off the precipice! Down we fell at a terrific speed fer ten minutes. When 'most to the ground I yelled ''Whoa'', and faithful Maud stopped. But sich wuz the speed we wuz fallin' at that we wuz on the ground 'fore fully stopped.

No sooner wuz we on the ground than we wuz again racin' down the valley. On roundin' a corner we run straight into another bunch of Indians. Wheelin' about, we retraced our way up the canyon, only to run squackdab into another bunch. Escape wuz impossible, and after killin' fifty of 'em with my bare hands I wuz overpowered and bound fast to a tree. To my sorrow faithful Maud wuz killed and the Indians prepared for a feast. When her flesh wuz exposed the evil ones each cut a piece from her, and after askin' a blessin', took huge mouthfuls. Waitin' 'till they wuz all in the act of swallowin' I once more yelled "Whoa", and faithful Maud stopped in every throat, chokin' all of 'em to death. After mournin' the cruel fate of my companion I walked the weary mile to the nearest railroad station.

Alas, them days has gone, leavin' me without nothin' but memories. What—ya don't believe my story? Stranger, them is fightin' words where I come from!



"Of Splashing Creek With Jeweled Brink"

16

Swinging Along The Trail

Thrill of the night that is almost gone, Of the sights and sounds of the coming dawn, Of the hoof-beats pounding on and on. Thrill of ledges in sunrise pink, Of splashing creek with jeweled brink, Of quiet pool that bids one drink Swinging along the trail.

Thrill of peaks 'gainst a wall of blue, Of colors mounting hue on hue, Of chickadees that sing to you. Thrill of a horse with graceful stride. Of his silent love and his air of pride, Of creaking leather as you ride Swinging along the trail.

Thrill of a bracing mountain breeze, Of the whispered song of a thousand trees, Of the tempest's roaring harmonies. Thrill of the eagle soaring near. Of the lazy bear and the bounding deer, Of the stag that watches you disappear Swinging along the trail.

Thrill of riding in the night, Of the cheerful beam of a cabin light, Of the shimmering lake when the moon is bright. Thrill of the smell of virgin sod. Of the flowery path where the willows nod. Thrill of riding alone with God Swinging along the trail.

Flovd Larson

Deer Trapping On The Kaibab

By Odell Julander Junior Range Examiner, Kaibab National Forest.

Deer trapping was inaugurated in 1924 on the Kaibab National Forest for the purpose of helping to reduce the deer herd on the severely over-grazed range and to supply dear for stocking other ranges and parks. Since that time the Kaibab has probably taken the lead in deer trapping in the United States.

The first traps were box affairs in which only one deer could be caught at a time. It was possible to catch deer in them by baiting with forage, but the objection was that the trap had to be emptied before another deer could be caught. This type of trap was inadequate to supply enough deer to be shipped out in truck loads as the market required. To increase the supply, a small, round corral trap constructed of net wire was devised in which more than one deer could be caught. This trap had wings outside converging at a trap gate. It was used successfully in catching larger number of deer than the box traps, but the deer could not be handled after they were trapped. There was no place for the deer to hide in the open wire corral and they would often kill themselves by jumping into the fence. The antlered bucks could not be handled at all and would often injure other deer. This trap proved unsuccessful because of the large number of deer killed in getting them out of the traps into the trucks. No attempt had been made to handle anything but fawns prior to this time.

By the method of trial and error, with many experiments and much reconstruction, the present successful traps were developed.

There are two deer traps in use on the Forest at the present time, one at Big Springs and one at Slide. Of the two, the Slide trap has the better trap corral and the Big Springs trap has the better shoot and loading pens. These two features will be combined, which will make the most desirable trap yet devised for deer trapping on the Kaibab.

The complete layout consists of a trap corral, a holding field, and a shoot with pens for handing and loading. The trap corral encloses a reservoir which is the only water within several miles. It is a circular corral covering about one acre with a trap gate on the south and another on the north. These gates were located as near as possible at the places where the deer came into water before the reservoir was fenced. The corral narrows up at the west end to an 8-foot trap gate which leads to the holding field.

The holding field is larger than the trap corral and has a natural cover of shrubs and trees under which the deer may hide and become quiet. At the west end of the holding field a wing fence leads to a V-shaped shoot. At the mouth of this shoot is a heavy roll curtain. The shoot is made of woven wire for a short distance and then high board fences replace the wire. Near the mouth of this high board shoot is another roll curtain. About 20 feet from this curtain the shoot narrows up to a 3-foot trap gate. Just beyond the gate a roof stretches from the top of one fence to the other forming a closed shoot which leads to the pens. The closed shoot and all of the pens have trap gates which may be worked by ropes. They also have hinged doors in the roof to facilitate the working of the deer and through which the bucks may be caught and dehorned. Joining the last holding pen is the loading pen. This has a curtain lengthwise through the middle, behind which a man may hide while working the deer into the crate. The door to this pen is the same width as the crate which is placed against it.

All wire fences are about 8 feet high, made of net wire stretched loosely on the inside of the posts with poultry wire over it. Such a wire fence prevents the deer from running into the posts and has considerable give, making it less dangerous for the deer when they crash into it. The poultry wire prevents the deer from tearing their mouths and noses on the coarser net wire.

All trap gates and curtains are worked by ropes from a hide-out rear by. The trapping must be done when there is no rain or snow to supply water on the outside and at the time of year when the deer are inhabiting the trapping area. Either spring or fall is suitable.

The trap gates are opened and a man is stationed in the hide-out at sundown. About dusk the crunching of gravel beneath sharp hoofs, first in one direction and then another, announces the coming of the first deer in to water. One coming down the east ridge, another over the pass—they string in one or two at a time through the gates to which they have become accustomed. Sometimes they pass back out as soon as they have finished drinking and sometimes stop to visit with other deer that are stringing in slowly. The hide-out man waits. Soon a bunch of 15 or 20 deer come trailing over the south pass. They come straight into water without hesitating to browse on the way. When they are all well inside the gate the hide-out man quietly releases the rope to the south gate and then the north gate and the deer are trapped. The instant the deer hear or see either gate close (Continued on Page 41.)

Freshman Damderology

Assembled

All trees have two names, usually old ones from history, like Washington cyforus or Juliper scotch. Some trees are named after saints because they both have a beautiful characteristic, and it's hard to get to the top.

You can remember trees easiest by the meaning of the names. The aspen sheds no cotton and so is a popular tree. So is the maidenhair tree; its other name is Dontgo yew. The basswood we can tell when we get close to it because it has so many suckers around. The cak is a Queercus—they say it's an oak not because of the wood but because of the 8 corns. But it isn't related to Cornus. Cornus is called dogwood because of the bark; the bark is red. The Ablies are not able to be spruce and are called balsome because they weep resin when their blisters break. And Pinus tedious is a turpentine tree because it grows so fast. You can always tell the Jack pine because it has two needles—one for Jack and one for Jill. But the ponderosa pine makes you ponder—it has either two or three needles—mostly two but usually three. The pinon pine has pins as well as needles, and the Stika spruce has its fine points too.

But speecimens aren't so hard as keys—keys to gender. Pines have their leaves green, long and consistent, while spruces have leaves green, quite long and consistent. Pines have their leaves tied up by a fiscal and not insidious. Pinus flexilis is so limber I can't recall whether it belongs to the spruce or fur gender. Thuja pilataka has peltate coens and flat twigs—hemlock: Yupressus toumey has flattened twigs and very rank leaves (4 ranked)—Arba 'vita.

Well, I can sure say I'm very interesting in Damdrology.

Freshman in Fire Protection: A contour map is the country sawed out of boards and tacked together.

Marvin Barney lost the short story contest conducted by the "Juniper" because his understanding of the definition of a short story was that it was "a story which can be read in one sitting."

Reed Foster saw some jerked elk meat and asked the ranger if that was what was meant by the term "game preserve."

The Forest Nursery

By Professor T. G. Taylor Head of Forestry Department, U. S. A. C.

When the Department of Forestry and Range was organized in 1928, one of the most important projects was to secure financial help from the State so that Government funds might be obtained for the inauguration of a forest nursery program. Professor Lyle F. Watts, who was then head of the department, was successful in this effort and the development of a forest nursery was assured.



(Courtesy Extension Service U. S. A. C.) THE FOREST NURSERY AT U. S. A. C.

Late in the fall of 1929, five acres of land suitable for nursery use and in addition advantageously placed, since it was located just east of the College campus, was secured by the department. Early in April 1930 a considerable number of trees of different species believed to be suitable to Utah conditions was purchased through the State Forester of Colorado and in addition purchases were made in Pennsylvania and Washington as well as from the Forest Service Nursery at Monument, Colorado. A large number of these trees were packed **at Logan and shipped to the farmers of Utah for shelter belt, woodlot** and windbreak plantings in the State in accordance with the terms of Section 4 of the Clarke McNary Act, under which the project operated.

At this time it was also necessary to start developments looking toward the permanent establishment of the nursery. In view of the arid conditions of this locality a decision was reached eventually to place the entire nursery area under an overhead sprinkling system of irrigation. The first step was then to provide a container from which water could be pumped into the overhead lines. Necessarily this container had to be located close to the site of the proposed nursery building where the pump was to be placed. The preliminary water system then consisted of 165 feet of cement pipe leading from a nearby irrigation canal to a cement container having its top on a level with the surface of the ground. This container holds approximately 216 cubic feet of water when filled, the supplying pipe being large enough to provide a continuous flow of sufficient volume to meet the demands of the pump. Three overhead lines each 288 feet in length were then installed.

During this time, the trees not disposed of through sale were lined out to provide the nucleus of the next season's supply for distribution. Unfortunately the funds annually provided were by this time expended so that it was not possible to complete arrangements for watering the nursery stock on hand. Because of this condition, seed could not yet be planted to develop stock for future sales.

Climatic conditions during the summer of 1930 were particularly favorable and the trees set out flourished. Advantage was taken of frequent showers to cultivate, a process which helped in holding moisture in the soil over the dry periods.

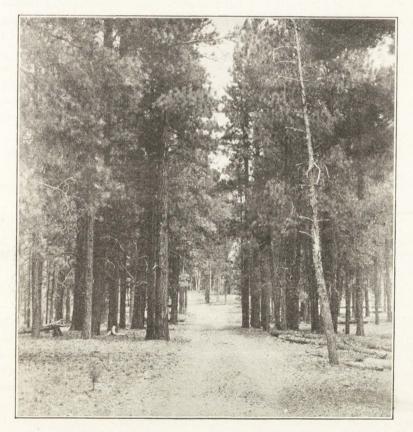
During the summer a cement base for a nursery building was constructed and a centrifugal pump was installed. Collection of seed was started in the fall of 1930 by obtaining locally the seed of honey locust, Russian olive and black walnut. At this time over 10,000 black walnuts were planted and in addition a considerable amount of Russian olive seed. Seed beds were planted to ponderosa pine and Douglas fir.

In the spring of 1931 it was necessary to purchase further stock for distribution. At this time also 1100 feet of underground cable was laid to provide power for the operation of the pump. With arrangements completed for the provision of water it was possible to make further plantings of seed. Honey and black locust, Siberian pea tree, Colorado blue spruce, oriental arbor vitae, and various other species were planted and the real establishment of the nursery became a fact.

During the summer of 1931 four more overhead spray lines were installed and the construction of a nursery building was completed. At present approximately two acres of land are under the overhead system of irrigation, and more lines will be added as needed.

In the early part of 1930 and 1931 windbreaks for the protection of the nursery were established, and completion of windbreak plantings will take place in 1932.

Even though the development and expansion of the nursery area is well under way many problems yet remain to be solved. Most important of these is the soil problem, on which studies have already been started. Final effort in all cases will of course look toward the development of good nursery stock best suitable to conditions in the State of Utah.



(Courtesy U. S. Forest Service.) BYWAYS HAVE A CHARM ALL THEIR OWN

Grazing In The Indian Service

By Jos. D. Cummings

Junior Range Examiner, U. S. Indian Forest Service.

Before beginning a discussion of the grazing problem in the Indian Service, something of the land status is necessary for a clearer understanding of the problems that arise on a reservation. There are two divisions in the land rating. The first is called tribal land and belongs to the tribe as a whole. The second is called allotted land and is parcelled out to the individual Indians in areas varying from eighty to one hundred sixty or more acres.

These areas when first allotted, are called trust allotments and are under the jurisdiction of the Indian Service. However, an Indian may, with the approval of the Commissioner of Indian affairs, apply for and receive a fee patent on his allotment. It is then his to sell or cispose of as he pleases. A great deal of the original allotted land has thus been taken from the control of the various reservations, since the officials have control over only the tribal land and trust allotments Much of this fee patent land is now owned by white men who have purchased it from the Indians. This further complicates the handling of the areas for grazing.

On some of the reservations the tribal and trust lands are principally timbered. On others it is largely open range land. And some have both open and timbered and open timber. All of these are used for grazing if it is at all practicable.

The grazing is of two types; namely, free and paid. All of the Indians have the right to run stock on their own allotments. In addition they have a tribal right of free pasturage for five hundred sheep or one hundred cattle or fifty horses on the tribal lands. If there aren't enough Indian-owned animals to use the feed the remainder is sold to individuals desiring range.

However, before this grazing can be sold to a white man the Indians must sign a power-of-attorney in favor of the superintendent of the reservation, permitting the sale of the feed contained on the individual allotments. No power-of-attorney is required for the tribal lands. In the event that an allottee is deceased, the heirs must sign, or at least a majority of the heirs must. Many of these Indians no longer live on the reservation: in fact, they are scattered all over the United States, in Canada, Mexico and some of the other foreign countries. The grazing man must mail copies of the power-of-attorney to as many of these as he has the addresses for mailing. The ones for whom there is no mailing address must wait until the Indian writes in for something and gives an address.

Nor are these all of the complications arising in getting the signatures. Many of the Indians, especially those living on the reservation feel that the carrying capacity rated by the grazing officer is too low. They want more money and are unable to see that in the long run they are ahead if their land is not overstocked. Like the children they are, they see only the present. It is the duty of the grazing man, therefore, to persuade them that the appraisal is fair. And no man can have an idea of the job this is until he has tried it, particularly if he has to use an interpreter.

With the area signed up so far as permission is concerned, it is next advertised for bids. These sealed bids are opened and the highest bidder receives the area, provided he is acceptable to the officials.

A permit is then made out by the grazing man, in which the number of stock, the grazing period, the term of the contract, the rate per head. and the total payment are listed, together with such additional provisions as are listed in a contract of this sort. Attached to this contract is a copy of the Indian Forest Service range control stipulations and the signature of a bonding company for the amount of one annual payment. Or, this may be replaced by individual surety wherein four responsible parties sign for an amount equal to twice the amount of the corporate surety for each bondsman.

This secured, the permit is sent to the Commissioner of Indian Affairs for his approval. Approved, a copy is sent to the Indian office, the original to the comptroller general, a copy to the permittee, a copy for filing to the proper county official, and one is kept for the reservation file.

The next thing is to keep track of the permittee and see that he is practicing good range management. This is none too easy because these regulations are new in the Indian Service. In fact, July 1, 1931 was the date if inauguration of many of the present regulations. These regulations are essentially the same as those of the Forest Service.

Of course the payments must be collected. On large permits this is usually one half before entry and one half late in the grazing season. On small permits it is usually all in advance before the animals are allowed on the range. Sometimes these collections are a little hard to make, but the bond prevents loss in most cases.

Once paid in, the money must be distributed. This is done according to the rating on the power-of-attorney for the allotments. The variation is large, depending upon the carrying capacity. Areas used for six months naturally rate more than areas carrying the same number of head for only three or four months.

An additional feature in distribution is that of division of payments due to heirships. It is not uncommon to have an allotment divided into small portions because of the death of the original allottee and some of his heirs. Occasionally one of the ultimate heirs may receive as low as one cent. This money must all be credited to the accounts of the individual Indians concerned unless a portion of the area used is tribal land. When this is the case, the portion of the payment due the tribal land is credited to the tribal fund.

This, then, is the detail involved in an individual permit, and there are usually several permits. The reservations vary, both as to size and number of permits. On one reservation in the southwest there are six permits paying an annual income to the Indians amounting to \$48,000. One permit of these six pays \$28,000 annually. On the other hand, the reservation on which the writer is stationed has some ninety odd permits varying from \$3.20 to \$1350.00 with a total of about \$13,500 annually. Other reservations have incomes from grazing amounting to \$144,600 in the highest to \$102.00 in the lowest reporting an income from grazing. The total income from grazing last year for all of the reservations was \$715,551.28. This is really an income of considerable proportion.

Until last year all this was handled in part by men who were trained in forestry and who had to learn the grazing as they bumped into the problems, and in part by men who were not even trained in forestry. In 1931 official regulation turned all of the grazing over to the Indian Forest Service. However, not all of the reservations have completed the changes yet. Because of this official change the Indian Forest Service appointed some five men from the 1931 Junior Range Examiner's eligible list. If these men prove to be satisfactory there will, no doubt, be more appointments.

Q. How would you get distribution of cattle on an unfenced range?

A. Put a bell on each cow, and set the dogs on.

"Tommy, can you tell me one of the uses of cowhide?" "Er, yessir. It keeps the cow together."

THE UTAH JUNIPER

VOLUME 3.

THE STAFF

Floyd Larson	Co-Editor
Dean Earl	Co-Editor
Ray Becraft	Faculty Adviser
Wallace M. Johnson	Business Manager
Bert Tucker	Assistant Business Manager
CLASS (OFFICERS
	President
Alvin Steed	Vice-President
Owen Despain	Secretary-Treasurer
Dale Schott	are Reporter

EDITORIAL A Family of Friends

Do you remember, Seniors, Juniors, Sophomores, your first solemn ascension of the two flights of stairs leading to the office of His August Majesty the Head of the Forestry Department, Thornton G. Taylor? And do you recall that your foolish apprehensions were immediately dispersed by the friendly twinkle in the eye of "T. G.", and that right then you began to feel that the department was a little bit yours? Do you know, fellows, that Ray came very nearly rebuking a student for addressing him as "Professor Becraft"? Has it occured to you that Paul's cordiality might be intended as well as natural?

Our department is young. To us falls the pleasurable duty of establishing the right kind of traditions for it. A moment's contemplation and reflection is sufficient to cause us to commend this exemplification of the spirit of good-will set for us by our faculty. Too many college professors in our land are so busy gratifying the peacock instinct within them that they have little time for, or interest in, our student-problems. Students' reactions to their instructors can be bad or good. The foresters, influenced by the free, open life of the woods, encouraged by the precedent set by the faculty, radiate good will towards each other in a manner that does the heart good.

Think what it means, fellows, this tradition we are building! It means that we are creating an atmosphere wherein we can feel at home, at our ease, where we can do our best work. It means the cementing of friendships which will be a source of joy always. It

1932

means that wherever two U. S. A. C. foresters meet, be they total etrangers to each other, that the bars of doubt and timidity have already been thrown aside for the entrance of friendship. Let's all get behind the movement. Let's continue to build this most worthy tradition. Let's be a family of friends.

The Utah Foresters

By Frank Fonnesbeck, '33, President.

The biggest, best-looking, and most active group of fellows ever to carry on as local Paul Bunyans, characterizes this year's Utah Foresters organization. The lure of a forester's life attracted many new members to the fold, and with a cumulative registration of seventytwo would-be lumber and sheep men in the department, the club has been able to carry out an extensive program of activities.

High lights of the year were the barbeque during the Fall quarter, and the banquet and the annual "Brawl" in the Winter term. with a schedule overnight hike and canyon party during the Spring quarter. The barbeque contests were handled along somewhat different lines from those in other years. Stimulation of class competition was carried to a peak by awarding a silver loving cup to the class carrying off the honors in sundry contests, athletic and otherwise.

Contact between club members and foresters of this Region has been established by means of a very successful banquet, and also through a number of lectures given by leading forestry officials on pertinent forestry subjects.

"A" Day found the boys gathered together in force to continue the planting program started some years ago. The Memorial Grove, located in the amphitheatre, was overhauled and all ailing trees replaced. Then a new project was started on the northern part of the campus. Approximately 350 Austrian pine, Ponderosa pine, Siberian elm, Honey locust and Russian olive were planted to form the nucleus for an extensive windbreak which should do much towards beautifying that part of the campus.

Another club feature which had its beginning this year was the participation in intramural sports. Although teams were not entered in many of the activities, those who entered acquitted themselves nobly, and as a result the club stood well up in the percentage column.

Events scheduled for the remainder of this quarter bear out the idea of an increased activity program, and will culminate what the Utah Foresters look upon as the biggest year in their history.

UTAH FORESTERS CLUB PICTURE

Reading from left to right: Third row-Floyd Larson, Glen Hemstreet, Wayne Allen, Philip Weeks, Ray Becraft, Fares McDermain, Marvin Barney, Gordon Hansen, Milt Sill, Cleon Whitlock, Phares Nielsen. Jesse Walters, Harold Cook, Clive Norris, Paul Dunn, LeGrand Olsen, Wallace Johnson, Lee Carlson, Owen Despain, Floyd Keller, Dean Tuft, Charles Michaels, Gordon Van Buren.

Second row: William Anderson, Thatcher Handley, Bert McAllister, Graydon Robinson, Averil Nielsen, Russell Bean, Miles Sorensen, Clyde Madsen, Allen Hansen, James Jacobs Clarence Thornock, Frank Fonnesbeck, president; T. G. Taylor.

First row: Don Ellison, Bert Tucker, Victor Stokes, Alvin Steed, Albert Day, Dale Schott, Dean Earl, Clark Anderson, Don Wadsworth.



Utah Foresters Annual Barbecue

By Alvin (Mike) Steed

On Friday, November 6, 1931, the "Big Wheel" of the Utah Foresters rolled into motion with the staging of the annual "pseudobarbecue". Approximately fifty embryonic foresters made the trip up to the Boy Scout Camp in Logan Canyon, from which point all operations were started.

As soon as the "bunch" arrived, fresh from the hike up to the old Utah Juniper and rejoicing at dismissal from afternoon labs, the events under supervision of the "big guns"-Taylor and Dunn, set full sail. In the fifty-yard dash Keller pushed over the tape first, closely followed by Beck (Frosh) and Wright (Soph) in order named. Wally Johnson added five more points to the Juniors total score by taking the one-man-bucking event in the fast time of 53.4 seconds. Tuft boosted the Frosh score by three points, while DeSpain finished in third place to start the Seniors off. The chopping contest brought forth the results of a summer's field work and Thornock, the Clearwater beast, chopped his way to victory. Madsen and Ellison furnished the close competition. Whitlock, representing the Junior Class, Ellison, a Soph, and Kropfli, Frosh, finished in the order named to make the sack-race a jumping success. Carlson and Thornock led the way in the two-man-bucking by sawing through "ve olde log" in 14.1 seconds. Allen-Wright contingent ranked second while DeSpain and Steed left the "vittles" long enough to garner a third for the Senior Class. Beck, lowly Freshman, showed his heels to a fast field, to cop off the one-hundred-yard dash, but was chased over the line by two fast boys-Wright (Soph) and Keller (Junior). Perhaps the outstanding event of the day was the tree-climbing fracas. Thornock disqualified himself by jumping to the ground. First place went to Madsen, representing the Frosh, while Tucker and Steed (sans parachute) battled it out for second and third places. Both boys sunk the spurs too deep and got down before dark with the same elapsed time. A gruelling obstacle race brought forth some heated competition with Fuller crawling over the finish in first place, thus keeping the First-year men in the running. Johnson and Allen added points for the Juniors and Sophomores, respectively. The Freshman three-legged team took first but only after barely nosing out three other combinations. After the final event, the tug o'war, was won by the Juniors, the totals were added up with

the final score standing: Juniors 37, Frosh 33, Sophs $15\frac{1}{2}$, and the mighty Seniors $4\frac{1}{2}$. Hats were than doffed to the Juniors, after which the "Outfit" adjourned to the cabin where lamb chops, "murphies", buns, hot chocolate, and coffee were winners in the final event. Licorice and apples combined with short talks constituted the evening camp fire program.

Before returning to the city, a short trip was made into the Logan Cave. On the trip down the canyon, consensus of opinion was to the effect that the day had been replete with well organized action, coupled with a delicious sheep-herder supper. All in all, the outing was successful and the Utah Foresters had learned to play together.

Annual Foresters Ball By Bert Tucker

The Foresters Annual "Brawl", outstanding event of the club's social calendar, was held February 12th in the ladies' gym. The hall was decorated with many evergreen trees, giving an outdoor effect that was further heightened by two tents pitched in a "grove" at one end of the gym. One of these, from which refreshments were dispersed, was a mecca for the hungry and thirsty dancers: while the other, arranged as a typical ranger's camp, was very popular during intermission. Clark Anderson's pet porcupine proved to be a great attraction, although personal contacts were avoided.

Dance music was furnished by John Smith's "Varsity Vagabonds". Professor and Mrs. T. G. Taylor and Professor and Mrs. Paul M. Dunn chaperoned the party.

The committee in charge included Floyd Larson, chairman; Clarence Thornock, refreshments; Wallace Johnson, Milt Sill, Bert Tucker, and Lee Carlson.

Shoddy-

Old sheep to lamb: "Don't you let me catch you associating with any of those trashy rabbits. Remember, you are all wool, and they have cotton tails."

Visitor: Your husband gets a lot of sentiment out of his pipe. doesn't he?

Mrs. Richquick: Indeed he does. It's perfectly disgusting to see him clean it."

Foresters Banquet

By Dale Schott

The Utah Foresters fourth annual banquet held at the Bluebird December 12, proved to be one of the most successful events of the school year. A delicious elk dinner with appropriate trimmings was served to a group of seventy-five men consisting of forestry officials from the regional headquarters at Ogden, Utah foresters from the Cache National forest, members of the Utah Foresters Club, and members of the College faculty.

"Mike" Steed, toastmaster for this occasion, made the banquet a very gay affair by means of his "wisecracking" directed at the various notables present, who of course made some very snappy comebacks. Mike, however, stood his ground admirably.

Each speaker was introduced through means of a joke involving some intimate part of his private life. His response was limited to a two minute talk. On several occasions speakers trespassed the allowed limit and were called down by an ingenious whistle called a curfew.

The place cards were the cause of much comment. They represented a uniformed forester with a pitch fork in his hands demonstrating a new method of brush disposal. Draw your own conclusions.

The music rendered was exceptionally fine and was well received. Floyd Larsen played a saxaphone solo accompanied by Richard Owens at the piano. Allen Hansen, playing his own accompaniment, gave two selections, "Eleven More Months and Ten More Days" and "Giddap Napoleon".

Mr. Dana Parkinson, principal speaker for the occasion, gave a very interesting talk on the subject "Creating New Wants," as applied to the field of forestry. Numerous two minute talks were given by forest service officials and members of the College faculty; of these, one of the most outstanding was presented by Director William Peterson of the Extension Service, whose subject was, "Forest Recreation." The closing speech was given by President Frank Fonnesbeck of the Utah Foresters.

SHALER WINS AGAIN.

Schott and Knott agreed to have a duel. Now the shot that Knott shot shot not Schott but shot not at all, while the shot that Schott shot shot Knott; therefore Knott being shot and Schott not, Schott won notwithstanding.

Roll Call

Freshmen

Athay, Morris B., Paris, Idaho Anderson, William, Huntington, Utah Baldwin, Evins, Winslow, Arizona Bean, Russell R., Brigham City, Utah Baker, Trent, Smithfield, Utah Barney, Marvin L., Ferron, Utah Beck, Dean, Logan, Utah Crane, Basil, Logan, Utah Costley, Richard J., Ashton, Idaho Cook, Harold A., Ferron, Utah Dopp, Donald, Logan, Utah Day, Albert B., Richmond, Utah England, Edwin, Logan, Utah Fuller, Hugh, Columbia, Utah Handley, A. T., Richfield, Utah Hansen, Gordon J., Logan, Utah Hanson, Walter O., Providence, Utah Hansen, Gerald M., Logan, Utah Harris, Newman, Logan, Utah Hovey, Dennis R., Logan, Utah Jorgensen, S. E., Ophir, Utah Jones, Jay P., Spanish Fork, Utah Jones, Mark, Springville, Utah Jensen, Vernal, Idaho Falls, Idaho Jensen, Rue, Glenwood, Utah Kropfli, Walter, Logan, Utah Kriss, Charles E., Ogden, Utah Lee, Clark, Monroe, Utah Madsen, Clyde, Brigham City, Utah Murray, Fred, Springville, Utah McAllister, Burton, Kanab, Utah Norris, Cleve, Randolph, Utah Olson, Paul, Logan, Utah Redd, John DeMarr, Blanding, Utah Stokes, Victor, Slaterville, Utah Sorensen, Carl W., Lark, Utah Smith, Clyde, Logan, Utah Smith, Wendell R., Logan, Utah Steadman, Lee, Logan, Utah Taylor, Seymour, Salt Lake, Utah Tuft, Dean W., Monroe, Utah Waldron, Eldred, Morgan, Utah Weeks, Philip V. Ogden, Utah

Sophomores

Allen, Leland F., Logan, Utah Allen, Wayne, Teton City, Idaho Eliison, Donald, Nephi, Utah Gunderson, A. B., American Fork, Ut. Hemstreet, Glen, Vernal, Utah Jackson, Garold, Beaver, Utah McDermaid, Ferris, Logan, Utah Olson, LeGrand, Preston, Idaho Sill, Milton, Logan, Utah Tucker, Bert, Salt Lake City, Utah Van Buren, Gordon, Ogden, Utah Waite, Victor, Smithfield, Utah Walker, Thomas, Providence, Utah Winkel, Antone, Richfield, Utah Woods, Lowell G., Ogden, Utah Wright, Milton, Blackfoot, Idaho

Juniors

Anderson, Clark, Provo, Utah Carlson, Lee H., Logan, Utah Crowl, John M., Urbana, Illinois Fonnesbeck, Frank, Logan, Utah Foster, Reed, Safford, Arizona Hansen, Allen, Richfield, Utah Johnson, Wallace M., Ogden, Utah Larson, Floyd, Mt. Pleasant, Utah Michaels, Charles C., Ogden, Utah Nielson, Averil, Ephraim, Utah Nielson, Phares, Fountain Green, Ut. Osborne, Wallace, Minersville, Utah Robinson, J. Grayson, Kanab, Utah Sorensen, Miles, Mt. Pleasant, Utah Talich, Paul, Bristow, Nebraska Thornock, C. S., Bloomington, Idaho Wadsworth, James D., Logan, Utah Walters, Jesse R., Rexburg, Idaho Whitlock, Cleon, Mayfield, Utah

Seniors

DeSpain, Owen, Venice, Utah Earl, Dean M., Nickerson, Kansas Jacobs, James C., Mt. Pleasant, Utah Julander, Odell, Kanab, Utah Schott, Dale, Ogden, Utah Steed, Alvin V., Ogden, Utah

Department Alumni

The Forestry and Range Department was organized at Utah State in 1927, and the first group to complete the curriculum required for the bachelor's degree in forestry was graduated in 1930.

Class of 1930

Adelbert Fausett, forest ranger, Skyforest, California.

J. D. Hansen, junior range examiner, Panguitch, Utah.

Class of 1931

Val. I. Bentley, graduate student, U. of California, Berkeley.

Edward P. Cliff, junior range examiner, Leavenworth, Washington.

Wilford L. Hansen, technical assistant, Logan.

Courtland P. Starr, assistant in winter range project, Utah Agricultural Experiment Station, Logan.

Marriner Swenson, graduate student, U. of California, Berkeley.

College Alumni

In addition to graduates of our recently organized forestry and range department, a number of alumni of Utah State have made forestry or range their vocation. Most of these have obtained degrees with majors in closely related departments, and several have had graduate training here or at other institutions. Report of any omissions will be appreciated as we desire to keep in touch with this group of alumni and their accomplishments.

Ernest Winkler, assistant regional forester, Ogden.

James T. Jardine, 1905, Chief, Office of Experiment Stations, U. S. D. A., Washington.

C. E. Fleming, 1909, professor of range management, U. of Nevada, Reno.

Alfred E. Aldous, 1910, professor of pasture management, Kansas State Agricultural College, Manhattan, Kansas.

J. L. Peterson, 1911, associate range examiner, Baker, Oregon.

Dr. George Stewart, 1913, senior ecologist, Intermountain Forest and Range Experiment Station, Ogden.

C. F. Martineau, 1914, forest ranger, Canton, Montana-

- J. Q. Peterson, 1916, U. S. Geological Survey, Washington.
- R. J. Becraft, 1917, associate professor of range management, U. S. A. C., Logan.
- C. J. Olsen, forest supervisor, Austin, Nevada.
- Q. David Hansen, forest ranger, Jarbidge, Nevada.

S. Cooper Smith, 1925, Junior range examiner, Porterville, California.

A. J. Wagstaff, 1926, forest ranger, Moab, Utah.
W. F. Price, 1927, forest ranger, Logan, Utah.
Melvin Burke, 1928, graduate student, U. S. A. C., Logan
Ivan Christensen, 1929, forest ranger, Monticello, Utah.
Jos. D. Cummings, 1929, junior range examiner, U. S. Indian Service, Dixon, Montana.

Arnold R. Standing, 1929, associate range examiner, Ogden. S. Bryson Cook, 1931, forest ranger, Minkcreek, Idaho.

To S. B. Locke the Utah Foresters wish unqualified success as secretary of the Isaac Walton League of America. Barry spent many years in Utah in both administrative and technical Forest Service work. His outstanding contribution has been in the field of wild life, and the present position is a fine recognition of his achievement.

R. E. Gery has retired after some twenty years service in the regional staff of the Forest Service at Ogden. "Bish" is a genial friend and a loyal supporter of the Utah Foresters and we express here our good will and best wishes.

Joe Falck, also retiring from the Forest Service at Ogden, has been a warm Aggie supporter, and his son Louis was an outstanding guarterback in football. We extend our best wishes to Joe.

He: Why do you want me to go away?

She: You deceived me. You told me that you were a Southern planter and I find that you're only an undertaker in Atlanta.

Baby Bacillus (in test tube)—"Father, why can't I go outside and play?"

Father Bacillus "Hush, my son! Remember that you belong to the cultured class."

Ranger Bill: When a man is wrapped up in himself he makes a mighty small parcel.

First Cannibal: "Too late for dinner?" Second Cannibal: "Yes, everybody's eaten."

Alphonso

By W. M. Johnson '33

Alphonso we called him, and he was an old gray coon. Last summer it was my good fortune to capture this wily individual who soon became the pet of the entire crew. We were camped on the upper San Sevaine flats in the San Bernardino mountains working on road construction for the Forest Service.

For several mornings we had noticed coon tracks around the camp garbage pit. A council of war was called and we decided to trap the marauder. Accordingly three steel traps were brought out from town and carefully concealed in or near the pit. That night several bets were made concerning the probability of there being a coon in camp next morning, and everyone was excited.

Morning came and someone scrambled out to welcome our expected guest. We were disappointed—except that several fellows collected their bets. It was Saturday and as usual the rest of the crew went to town at noon. I was the only foreigner to the state and had no attachments in Berdo, so it was my duty to guard camp. My vigil was well rewarded this week end.

Sunday morning it was 8:00 o'clock when I rolled out of bed and went to look at the traps. I admit my surprise but sure enough, Alphonso was a prisoner.

Then another problem—Alphonso must be released from the trap. My previous trapping experience had been confined to mice in the kitchen pantry, but now I was confronted with a snarling, spitting, clawing savage about the size of a half-grown collie. And novice I was, while he seemed to combine his fighting spirit with the experience of many a combat.

In my first attempt to free him I tried to fasten a loop around his jaws, but his short tapering nose was too slippery. My next try was to get a stick of wood between his vicious-looking teeth, but it failed, too. Finally I succeeded in getting a loop around his hind hands and one around his neck, by which I stretched him out. Even under this handicap he displayed an astonishing amount of action. I brought a piece of heavy canvas and threw it over him for protection while I held him firmly between my knees. In this manner I was able to free his hands and get a loop of telephone wire around his neck. With this I staked him out to a small oak tree growing near one of the tents, and sat down for a much needed blow. I looked at my watch. It was just 10:00 o'clock, which reminded me that I had not as yet had breakfast. With a feeling of great relief I went to the cookshack for a meal.

However, my peace was not to last, for Alphonso demanded frequent attention. On one occasion he had climbed a tree, and when suddenly checked by the wire he went dangling over a limb to a nearhanging. Throughout the entire day I was chasing after Alphonso to untangle him from something.

That night the fellows brought with them a shining new dog harness and chain which we presented to the ungrateful Alphonso the following morning. As could be expected everyone was anxious and inquisitive concerning his capture, but I was careful to say as little as possible.

We kept Alphonso for ten days before he finally escaped to return to his worried family. During that time he tamed sufficiently to lead around with the chain and occasionally submitted to gentle petting, although everyone was careful not to be too familiar.

Alphonso had but one enemy, the cook. It was the coon's queer habit to set up an unearthly racket with the tools and cans in the blacksmith shop just before dawn, and shortly before the cook was ready to get up. The cook objected and even threatened, but no one seemed to pay any attention to his ravings. One morning Alphonso was missing. The chain was there intact but Alphonso was gone, and as yet no one has definitely solved the mystery of his disappearance.

"T. G." started something in "Related Resources" with his tale of how the farmers on Lake Champlain used to drive their wagons out into the water and spear wagon loads of salmon with pitchforks. Dale Schott went into seclusion for four days and triumphantly emerged from his research with authentic proof that fish had been known to jump out of the water and pick off apples from low-hanging limbs. Just as the boys were bringing in the fur-lined bath-tub to award to Dale, Paul Talich tranquilly announced that out in North Dakota the cows, when they waded into the lake waters to cool themselves on hot days. were always sucked dry of their milk by the fish in the lake. Paul was crowned Royal Champion.

Absent-minded-

Business-man-kissed his stenographer and then went home and tried to dictate to his wife.

CHOOSING A PROFESSION (Continued from Page 6.)

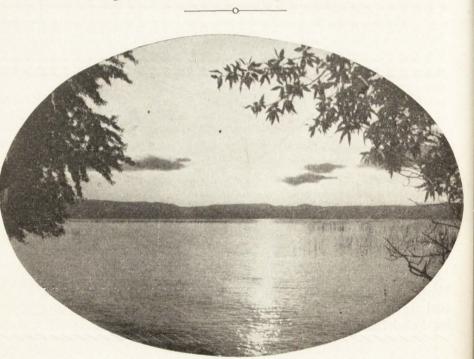
and for between.

Forestry at present is almost entirely a salaried job. The forester works for some one else. If the student looks forward to financial rewards, to being on his own, forestry is not very promising. The average salary of foresters is probably less than \$3000 per year.

If the student is looking for an active, interesting life work with its share of discouraging days, as well as its days filled with satisfaction of problems solved, he may be happy in forestry.

In this brief analysis, I have not attempted to present any argument for or against forestry as a profession, but simply to set forth some of the facts.

To a student facing the choice of a profession, the suggestion is made that he make a similar analysis of some of the other professions and set it alongside this one before making his choice.



SUNRISE ON BEAR LAKE

(Courtesy J. P. Smith)

THE NEW HOME OF OUR WATERFOWL (Continued from Page 9.)

goose, white-fronted goose, and black brant are rare visitants, while the fulvous tree duck is only of record.

The record of other water varieties known to the Bear River marshes is fairly complete and shows the following number of species of the various families: loon 1, grebe 4, pelican 1, cormorant 2, heron 7, ibis 1, crane 1, rail 3, plover 5, snipe 16, stilt 2, phalarope 2, gull 7. A few of the species mentioned are not numerous but the majority are abundant. Many species nest on the marsh, and it is logical to believe the number nesting will be increased as the reclaimed area is made more attractive and suitable for that purpose.

Dr. Alexander Wetmore reports, as a result of his observations covering three seasons—1914, 1915, 1616—that eleven species of wild ducks and the Canada Goose nested on the Bear River marshes. Eight species of ducks were common in nesting occurrence: the redhead, cinnamon teal, mallard, shoveler (spoonbill), gadwall. ruddy duck, pintail and green winged teal. The widgeon and blue-winged teal he reports as only fairly common, and the scaup duck as rare.

Of the other species of birds not classed as water or marsh varieties, 76 are known to the refuge area. These include the hordes of small birds commonly referred to as song birds, the numerous raptores and the upland birds.

An abundant store of food is essential to waterfowl areas and the Bear River Refuge and bordering territory is generously provided for in this respect.

Approximately 50 varieties of acquatic plant life, having a food value for waterfowl, are recorded. Of first importance is the Sago pondweed (Potamogeton pectinatus), which is conceded to be the best all-round wild duck food we have. Sago pondweed, or "potato moss" as it is called locally, is greatly relished by ducks as nearly all of the plant is palatable, producing as it does edible tubers, stems. leaves and seeds. It is very abundant and great masses are yearly produced on the suitable areas.

Next in importance is the bayonet grass (Scirpus paludosus), a prolific growth on most sections of the Refuge.

Other valuable food plants are samphire (Salicornia rubra), duck lettuce (Atriplex hastata), salt grass (Distichlis spicata), and Musk grass (Chara sp.).

Aside from the food plants there are present other growths

which serve as shelter and protection for bird life. Chief among these may be mentioned the broad-leaved and narrow-leaved cat-tails (Typha latifolia and Typha angustifolia), cane (Phragmites phragmites), gray willow (Salix exigua), and black willow (Salix amygdaloides).

The Bear River Refuge is an important storehouse and supply depot for migratory wild fowl in its relation to other western states, as is shown by returns received from branded birds. For the most part the birds banded are those raised in the marsh. although in the case of a few species they are ducks banded during the flights and are as a consequence not a local product. Records for the past few years show returns from eighteen states, Alaska, Canada and Mexico.

The frequency with which banded birds are reported from Colorado, California. Idaho, Montana, Nebraska, Nevada, New Mexico. Texas, Wyoming, Utah, Canada and Mexico indicates these twelve sections as the principal range of the Bear River marsh ducks. Occasional returns from Alaska, Arkansas, Arizona, Kansas, Minnesota North Dakota, Ohio, Oklahoma and South Dakota are evidence that that territory draws from us to some extent. doubtless quite limited

It is an established fact, that birds banded in the Bear River section rarely travel east of the 100th meridian. which bisects the Dakotas about midway. Ducks banded in the Illinois River Vallev seldom drift west of the 100th meridian. These data quite definitelv indicate two separate bodies of waterfowl, one forming a western, the other an eastern group.

It is only reasonable to suppose that the Bear River Refuge will not reach the maximum of efficiency for several years. It remains for nature to do her work and bring back to productivity the marsh areas. and to otherwise build up the entire project so it will be attractive and desirable for the individual needs of the various species of migratory birds that will make it a mecca on their semi-annual pilgrimages.

It is safe to predict that as conditions improve from year to year the feathered flocks will come in increasing numbers and remain for more extended periods. It is quite likely, also, that additional varieties will visit the marsh, and species which are now rare visitors, or unknown, will become regular patrons.

She: What do you use those long ropes for? Cowboy: We catch cattle with them. She: Yes, but what do you use for bait?

DEER TRAPPING ON THE KAIBAB

(Continued from Page 19.)

they all bound for the gate through which they came. some of them crashing into the wire. When they see that there is no chance of getting out that way they follow the fence around, heads held low, looking for a place to escape and fighting the fence. The hide-out man walks quietly to the east side of the trap and makes his presence known to the deer. Very quietly he works the deer up into the holding field. giving them plenty of time and frightening them as little as possible. They are locked in the holding field and the man returns to the hideout, opens the trap gates and awaits the coming of more deer. If it is a moonlight night he will probably have success trapping as long as the moon shines and by morning may have a hundred or more deer in the holding field.

Now and then a band of mustangs cautiously come in to drink and the gates must be left open or fence and all will probably be broken down by these wildest of wild Kaibab animals. The frequent groups of none-too-tame cattle coming in to water are also given free entrance and exit. The reservoir is a busy place all night and the yipping of coyotes adds to the wildness of the scene.

When a sufficient number of deer has been caught and placed in the holding field, the trap gates to the reservoir are tied open so that stock and deer have free access to the water. The deer are held and fed in the holding field until the time comes to load them. If left undisturbed they rest quietly under cover of the trees and shrubs.

When time comes for loading, a man is stationed in the hide-out with the curtain and trap gate ropes. A few men spread out behind the deer and very quietly and slowly work them up toward the shoot. Precaution is taken to frighten the deer as little as possible while working them up to the shoot. If they become too excited they scatter and dash back, crashing into the fence. This often results in a broken neck for one or more deer and they are very difficult to handle in this excited condition. They are allowed to work up to the shoot by themselves as much as possible. When they reach the wing leading to the shoot and the leaders start through, the men rush up and frighten the bunch so that they follow the leaders and all of the deer dash into the shoot in a bunch. The instant they are all past the first roll curtain the hide-out man releases it and it comes down with a bang, frightening them on beyond the second curtain which in turn drops on the heels of the rear deer. This frightens them on into the

open-topped board shoot and the trap gate there closes behind them. They seem to think that the open topped board shoot is an avenue of escape and usually follow it through the next trap gate which leads into the closed shoot and pens. The men follow behind and if any deer does not follow the bunch it is taken by the ears or horns and led on through.

Sometimes the trapping is performed with clock-like precision without any man-handling of the deer. Other times the work does not go so smoothly. Some deer will turn back after they get through the first or second curtain or the trap gate. The men must then get in the shoot with them. If there are any bucks, they are caught nrst and shoved bodily into the closed shoot. Next the does and tawns are taken by the ears and dragged bawling and striking through the trap door. Sharp hoofs and antlers are numerous when a man gets into a small pen with a few frightened deer.

The mature bucks with large antlers should be cut out and not run through the shoot because they are dangerous to handle and will kill too many of the other deer before they can be caught and dehorned. Young bucks up to three-year-olds can usually be handled successfully.

As soon as the deer are in the closed shoot, the bucks are roped by the horns and their heads drawn up through one of the hinged doors on top of the shoot or pens and their antlers are sawed off. All bucks are dehorned as soon as possible to prevent them from injuring other deer.

Once the deer are in the closed shoot they are easily dodged from one pen to another. They are worked into the loading pen one at a time. As a deer enters the gate the man behind the curtain frightens or shoves it into the crate and closes the drop gate of the crate. It is then loaded into the truck and the crate placed back against the door of the loading pen to receive the next deer.

When the deer are loaded they are rushed to their new destination and released in as short a time as possible.

As a result of this trapping. the Kaibab Mule deer proudly roams the private and public parks throughout the United States, as well as many open ranges in the west.

There is still much to learn about trapping deer, but the Kaibab is able to supply more trapped deer at a very low cost than the market demands.

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I got your letter about which I owe you. Now be pachunt. I ain't forget you. Please wait. When sum fools pay me I pay you. If this wuz judgment day and you wuz no more prepared to meet your maker as I am to meet your account, you sure would have to go to hell. Trust you will do this, I am, very truly,—

"I like to watch the rooster crow— He's like so many men I know Who brag and bluster, rant and shout, And beat their manly chest without The first damn thing to brag about."

Small boy: "Does 'u wana buy two 'ittle tittins?" Lady: "Why, really: I didn't understand." Boy: "Does 'u wanta buy two tute 'ittle tittins?" Lady: "I'm sorry. Do say it again.' Boy, in disgust: "Oh, hell! Does 'u wana buy a dod dam tat?"

Re-called

Two burros were purchased for a Forest Service field party and were lovingly named for the two office girls. During the summer a letter arrived at headquarters:

"Forest Supervisor,

Dear Sir:

The Government burro, Luella, has given birth to a son whom we have christened 'Tom' (honoring the cook). Please inform us as to what disposition shall be made of the offspring.

Furest Assistant."

After a long wait of two days an official reply was received at camp:

"Forest Assistant,

Dear Sir:

Reference is made to your inquiry regarding disposition of the young burro, Tom. We suggest you exercise your own judgment in selecting from three possible courses. (1) Take him to the highest cliff and cast him off; then gather up the fragments and use them for soup. It will doubtless prove nutritious and stimulating to you. (2) Try keeping him until such time as his hide when tanned will be sufficiently tough to serve as protection to your own. (3) Nurture him fondly until he attains proper age to be separated from his mother. Then send him to some forestry school so that he may become an educated Forest Ass."

Sim Broderick's Job: (Not for foresters)

"What I want is something that don't call for no kind of ability whatever, and no kind of exertion to speak of, and ain't out of town. and pays good, and has a future." Kenneth Harris.

Scotch:

"I have done three men's work for ten years for one man's salary. Now you must give me a raise."

"I canna gie you that. But if you'll tell who the ither two are, I'll fire them."

Absent-minded-

"Where is the car?" demanded the Prof's wife. "Dear me! Did I take the car out?"

"You certainly did. You drove it to town."

"How odd! Oh, I remember now that after I got out I turned to thank the gentleman who gave me the lift, and he was gone."

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