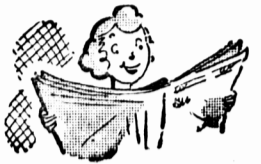




THE MODERN FARMER



NEWSY NOTES

THE CELL, THE BASIS OF ALL

By AGRICOLA

Last week this writer finished by stating that the most accurate distinction between animals and plants is in their manner of feeding. No animal is able to subsist on simple chemicals alone. It must have vegetable or animal food. Plants, on the other hand, can get along with water and carbon dioxide from the ground, carbon dioxide from the air, and a few mineral salts. With the aid of energy derived from sunlight, these are elaborated into proteins, carbohydrates, fats and oils, all complex organic compounds, by means of which are functions of the plants life are carried on.

The agency by which this remarkable feat of chemistry is performed is chlorophyll, the green coloring matter which is present in all plants. It is a complex of magnesium, iron and other elements, and is a very important part of the plant's life. It is a very familiar example of a very important part of the plant's life. It is a very familiar example of a very important part of the plant's life.

SCALLIONS

The scallion is a variety of onion that does not form a bulb, and is eaten raw as a salad, along with lettuce, peas, or radishes. In taste it is mild, resembling the Welsh onion or ciboule. They are sometimes termed "bunching onions" from their being sold in bunches. Because this variety of onion is believed to have originated in the scriptures, it has been named *Allium ascalonicum*, whence the name scallion. Great quantities of these mild onions were peddled in the streets of seaport towns in the North of England. I find young stalks of multiplier onions, pulled when about the thickness of a lead pencil, make an excellent substitute for these delectable salads.

"NEW PLANTS"

I am indebted to Professor R. R. Hurst, of the Laboratory of Plant Pathology, for specimens which prove an interesting addition to our flora. They are firstly the Great Beard, *Tragopogon pratensis* L., a stout, rather coarse, perennial with large solitary heads of yellow florets crowning the stalks. This is first cousin to the Salsify or Oyster-plant, *T. porrifolius* L.; which, as its name indicates, is used as food. The flower of Salsify, however, is purple.

A REMINISCENCE

The lines from Dr. Watts's hymn, quoted in Editorial Notes of July 17th, bring to mind an amusing little episode of my days on the Island. I had barely got settled when a neighbor proposed that I should go to church with him on the following Sunday. I heartily agreed to this and Sunday morning found us at the place of worship where I heard a very good plain-spoken sermon. When the service was over, everybody lingered outside awhile as the custom was, to give and receive the current news of the countryside. My friend, who was in a lively vein, introduced me to several of his acquaintances. Presenting me to one of them he said, "This is our Elder, Mr. So-and-so, and to him he said, "This is the man!"

Suited British Plants

The cool moist weather this spring just suited the British wild flowers just the best. Bellflower or campanula latifolia grew a main, and is now displaying blue-purple bells twice as large as those of foxgloves. I have never been able to save its seed for the seed vessels in previous years have always dried up and fallen off.

GROUND LIMESTONE

Due to the difficulty of getting supplies of ground limestone we would strongly advise the farmers to secure their requirements immediately while a supply is available.

We are prepared to make immediate shipment in bulk, delivered to any station in the Province in minimum carload lots at a cost of not over \$2.00 per ton, your station. Guaranteed analysis 94-98 per cent calcium carbonate.

This offer is good only up to the end of September, after which it will not be possible to accept orders.

J. J. LeCLERC

DRAPEAU
Bonaventure County, P.Q.

CONSERVATION

A WEEKLY COLUMN OF PRACTICAL OPINIONS OF THE VITAL ISSUES AFFECTING THE USES AND ABUSES OF NATURAL RESOURCES BY MR. LUDLOW JENKINS

(Continued)

The Souris River project affords a good example of these multiple benefits. There are three projects, one on the Des Lacs, a tributary of the Souris, and one on each of the upper and lower reaches of the Souris River as it enters this country from Canada and leaves to return to that country. Our engineering operations have provided not only the major nesting and breeding units in the whole refuge system but have also furnished flood protection for the remainder of the valley storing the run-off water for summer use, and restoring water levels so that wells are not going dry. They also provide a limited amount of recreational facilities in places where these will not interfere with the birds.

Although built for the primary purpose of restoring environment for migratory waterfowl, these refuges are serving the same purpose for countless other birds. While we talk in terms of migratory waterfowl, because it is largely among these birds that the money that is being used, we do not forget that we cannot restore marshes and lakes and make other improvements without wildlife frequenting such areas. There has been a tremendous increase in the number of individuals and in the variety of species of birds within the Souris River area, and there have been 114 species of breeding birds reported in the Lower Souris project alone since it was established and developed. Among other species that I have seen there myself are colonies of Sprague's pipit and Baird's sparrow (two varieties not too easily found by the average ornithologist). Numerous other species, including grebes, terns, gulls, and herons are coming back in increasing numbers each year to utilize the facilities made available to them. Both prairie chickens and sharp-tailed grouse are found on some 25 of these waterfowl refuges in numbers that make a fine target for the sportsman and insure the perpetuation of the species.

The Lower Souris refuge also has a population of some 600 to 800 white-tailed deer more deer than were thought were left in North Dakota. This population has built up rapidly following the posting and patrolling of the refuge and its development for wildlife. The accomplishments of the past few years have been the most hopeful ones in the history of the efforts to conserve American wildlife species and their organizations as the C. C. C. and other relief agencies have cooperated with us in the development of this present program had it not been for the aid rendered by the personnel of the various agencies. We feel that at least 3,500,000 additional acres of marsh in strategic points before we can be absolutely assured of the safety of the migratory waterfowl population. This acreage, if and when it is restored, will also mean much to all the nongame species that utilize marsh environments.

There is one other thing that should be mentioned in this very brief review of the present status of the refuge program; that is that in 1939 there was dedicated near Washington (refuge with adequate buildings provided, or in course of construction, to make it a great wildlife-research center. There, eventually, will be housed the entire wildlife-research laboratories of the Fish and Wildlife Service, which previously were in Washington, and the laboratories that have been developed and are being undertaken on this area. The refuge consists of 3,000 acres of land, woods, and water, within an hour's ride of Washington.

It is now available to the scientific staff for any kind of experimental or observational use they may care to make of it. It is expected and planned that long-time studies about the relationships of species of wildlife with each other, with agricultural crops, and with changing environments will be set up there in places and under conditions that will permit them to go on for many years without being disturbed. It is our hope to institute on this refuge such long-time studies as it is impossible to make on land where administrative control cannot be practiced by the research agency or where changing administrative policies may destroy a research program just at the time it begins to be of practical application. It is hoped to build up a complete history of the work area, so that as the years go by it will become increasingly valuable to the ornithologists, mammalogists, and other scientific men of this country as a source of information. It will also provide us with much-needed data for a wiser and saner administration of the land now in the refuge system.

It is the present policy of the Fish and Wildlife Service to be guided in administrative policies by research findings. I assume that this is an ideal condition that will never be completely attained. Research men are impatient when their findings are not soon put into practice; on the other hand, conservation men are impatient if the research do not find the solutions promptly. Even after a solution is found and tested, it takes a long time to get the average citizen to accept it. The program of refuges, system as large and as scattered as that of the Fish and Wildlife Service has now come to be. Previously we were not in a position to invite people to make free use of the refuges. During the period of construction we did not feel like burdening the limited personnel with the duties of looking after people on the refuges and providing for their wants, although I do not believe that the Service has refused a single request for permission to do scientific work on any refuge, even though a might inconvenience the personnel during the developmental period. As the refuges pass beyond this stage—and by that I mean the period of construction of necessary dams and dikes in order to restore water, the building of fences and the other things necessary to keep out the stock, the completion of administration buildings, and the provision of similar equipment necessary to develop a real refuge program—we should be able to invite people to give more attention to other phases of the work. All are invited to feel free to use these refuges in making studies of bird and animal life. The Service will be more than pleased to offer its cooperation and all available facilities in these areas. These facilities will be found to vary according to the location and the available personnel. Some refuges have modern and convenient laboratories situated on the ground, while others have the most primitive, wild conditions that could be found in an area, and probably never to be developed.

Our Service is proud, and we believe justly so, of the accomplishments along these lines during the past few years. We look forward with confidence to the time when we shall be able to say (and we hope that it will not be far in the future) that the refuges of this country are adequate to insure, so far as human provision is possible, that not one remaining species of American wildlife will vanish from the face of the earth.

The dark glasses and pipe don't hide the identity of this military man in New Guinea, for his cap and stride make him easily recognizable as Gen. Douglas MacArthur.

Standing Hay

Ernest McInnis, Cherry Valley, offers for sale by Auction, 35 acres of standing Hay, divided in lots, Saturday, July 24th, at 6 P. M.

W. H. BEATON, Auctioneer. Terms can be arranged. 7-22-43

TIMELY NOTES ON TOPICS CONNECTED WITH

Silver Fox Farming

Chris Lang, Editor of Fur of Canada, published in Winnipeg, has a very excellent article in the June issue, entitled, "The Shape of Things to Come," so good that we would like our readers to know about it, so here we are. "The fur ranchers today are building their own world of the future. They are building foxes and mink of a new excellence and of amazing variety. These furs will be worthy of the world of the future however marvelous that world may be...."

The dramatic development of the new type fox farming in the fur ranches that are distinctly different from anything we have seen in the past. They have been produced by mixing the numerous elements now at the command of the fox rancher. The fur trade is excited about the new programs and from now on we are looking for the smart new types that will appear each year. This is all to the good. But, let it not be forgotten that the STANARD SILVER FOX is the mother and father of all this and even now is the basic fox from which all the others must start. Whatever combinations are made with the derivatives of the standard silver, that standard silver blood must be preserved pure and intact. In breeding new combinations we may lose the way; if we have the standard silver, still pure, we may go back to first breeds and find the way again. The leading herds of standard silvers are more valuable than ever."

The above words quoted from Mr. Lang's editorials cause many of us to think and think deeply and not be carried away entirely by the lure of platinum, pearl platinum, and the various combinations of what we call the new type foxes. Above all other things must be kept pure and intact a select breeding herd and we must also not neglect in keeping that herd to have a variety of colorings ranging from the medium silver to the lightest and the darkest. If we do this and the future finds that the trend towards lighter—and what we call the new types—commences to fade away, we will still have a safeguard and be able to build up anew to the foxes that were so delightful to the eye so fascinating to the hand, and so valuable in the days of Dalton, Oulton, Tuplin and many other great figures of the past.

Some of the above names are almost legendary, although not half a century has passed since they were active and stirring figures in the fur industry of fur conservation. From time to time their names should be brought forth and publicity given to their efforts because the men with the finest and the same and energy they spent, the hopes and ambitions which they cherished, have made possible fur farming as we know it today. Ever engraved in our hearts and memories should be the names of these pioneer Islanders who did so much to spread the name and fame of this little Isle—the Garden of the Gulf—throughout the world.

The many friends of Guy Kennedy, representative of Purina Products, were delighted to see him around about as usual on Wednesday, after having been in hospital for over a week.

At a meeting of the Edmonton Fur Breeders' Association, held in June, Mr. Forsland, Superintendent of the Game Branch in an address stated that the province of Alberta was the largest fur producer of any province in Canada. The value of the furs produced in one year was over five million dollars. There are 145 fur trappers in the province and 97,130 animals were pelted last year.

The O.W. Thompson ranches, the head office of which is at Kitchener, Ont., are among the largest in Canada, probably about on even terms with the Colbits of Salsbury and Edmonton. Anyhow, their production of pelts last season was to the vicinity of 7,000, mostly silvers with some platinum and a great many white faces. The President and General Manager is Dr. W. E. Russell, who was at the time advisor to the Miran and Morrison Ranch at Northam, P. E. I.

We had a nice letter last evening from our friend Art Davis, Winnipeg, who reports a good crop of pups this year, all of them doing fine. He regrets that he won't be able to attend Old Home Week, which he has enjoyed so much for two seasons ago. We'll regret too, not being able to greet our long time friend, now one of the most successful fox farmers and lawyers in the wild and woolly west.

Dr. Lionel Stevenson, Guelph, Ont., has a thoughtful article in the Fur Trade Journal of Canada for July, some of which can be read with interest by our ranchers. From time to time we have parties coming to us offering for sale sows or horses that have died from accidents or other causes. Here is what has to say about using such types of meat. "The carcasses of animals that have died due to drowning, lightning, stroke, bloating, choke, or mechanical accidents should be used if secured and cut up at once. The meat or flesh of the animal spoils quickly in warm weather so no time can be lost in recovering, cutting up or grinding up and freezing such meats. Every hour of delay between the minute the animal dies and the time when the meat is subjected to freezing temperature, increases its chances of being unwholesome. Keep in mind the fact that the meat of the outdoors is a great stimulus to protein-destroying action of bacteria."

Also keep in mind that low temperatures retard bacterial and chemical action. The difference between wholesome food and unwholesome food can be measured frequently by the delays or slowness in getting perishable meats under the influence of freezing temperatures. During warm weather, not one minute can be lost in salvaging the meat from horses or animals dead due to any reason whatever.

Food poisoning by bacteria or other products. Bacteria are so widespread that it is very difficult to protect meat foods to retain adequate low temperature refrigeration to check or prevent the disease-producing organisms from growing and causing other toxins in meat intended for animal food.

Dr. W. E. Russell, speaking before the Ontario Fur Breeders' Association at Guelph, Ont., June 9th, said with reference to the whelping female fox. "If we are not producing more than we are using, there must be a reason for it and it is at these get-togethers such as today that we will get information that will help us with our problems. Candidly, I do not understand myself. I do know there are a number of contributing factors which enter into the matter of whelping successfully, or vice versa, and the following questions should be asked yourself—and acted upon.

Is your female fox bred to be a producer? Was your female properly selected when she was bred? Has your female fox been properly conditioned to raise a litter and has she been given a fighting chance to do so? In answer to the first question, I do not think any of us give enough consideration to the hereditary maternal instincts of the pup which we keep for breeders, quality being the main factor which we consider. This maternal instinct is a very important factor because a young female does not want to raise her litter nothing you can do will make her change her mind, and conversely if she is anxious to raise her litter, nothing you can do will make her surmount almost unbelievable odds to make a good job of it.

For breeders we should closely examine both the past records of her sire and dam for maternal instincts. If you recognize any bad habits in her pedigree, other than a chance with her. How many ranchers went out to improve their herds by buying good males and new strains—and have renewed their herds by so doing? The recent rush in buying foxes of the new types makes this angle well worth consideration.

In reply to the second question, most nutritionists claim that in the first six or eight months in the life of a fox its fate is sealed as to whether it will be a good producer or not. It is true that this is when the female organs are developed and if development is retarded in any way through such as rickets or mineral deficiency she will have much difficulty in giving birth to her offspring all through her life. Give a definite amount of feed during the early life of your foxes. Whatever you do care must be taken that you do not stunt the fetus by overfeeding or by giving her the necessary good proteins as these

SALE OF REGISTERED YORKSHIRES

The P.E.I. Swine Breeders Association will conduct an auction sale of registered boars and sows of breeding age at the Swine Building, Exhibition Grounds, Charlottetown, on Wednesday forenoon, August 11th, 1943.

Sale will commence promptly at 10:30 a.m. Boars and sows to be offered in this sale will be judged in the regular Exhibition classes, judging to commence at 9:00 a.m. All boars offered for sale will be from sows qualified in Advanced Registry.

Farmers and farm organizations interested in purchasing quality foundation breeding stock, selected from leading Island swine herds, should endeavour to be present at this sale. Further detailed information may be obtained by writing to S. D. Irvine, Secretary, P.E.I. Swine Breeders Association, Box 489, Charlottetown.

Are the elements that produce growth of her body and skeleton.

Is the female in condition to raise a healthy litter? This refers to the adult female as well as to the young female. Naturally if not in good health and condition you cannot expect her to raise a healthy litter. In fact she is likely to abort her litter before the 52 days are up. The pups of course will be dead. A great deal depends upon the ration she has been fed during the winter months.

The type of kennel is important. Do you have bedding in her nest boxes? Remember that a large nest box is always colder than a small one. I like a little supply of marsh hay. This can be scratched out as easily as straw or other material and it keeps the newly born pups off the cold floor, also it is always dry. It does not appear to do any

harm to look at the litter the day it is born, and often this practice saves a litter. We make a practice of looking into the kennels on whelping day. As for feeding around whelping time, the only change we make is to reduce the amount of feed for a week before and a week after whelping.

Foster Pickard is showing faith in fox ranching by building a new ranch on the property formerly owned and occupied by William Brown, St. Peter's Road. The situation is an ideal one and on that property some champions have been raised by the former owner. We wish Mr. Pickard every success in his new venture and may also state that Mr. Brown is by no means out of fox farming but has transferred his ranching activities to his father's property on the Mount Edward Road.



CLIFF CLIMBING FEATURED PRE-INVASION DRILLS

Climbing rocky, mountainous country and scaling cliffs (top) prepared the Canadian troops for their job. This scene on the island of Sicily in the lower picture, Capt. J. S. Porter of St. John, N. B., carrying large pack, leads his men up a rocky slope in the type of hard, pre-invasion training which Canadians practiced in Britain for several months before sailing for the Mediterranean. (Canadian Army Photo)

Our Boarding House By Major Hoople



OUR BOARDING HOUSE BY MAJOR HOOPLE

Out Our Way By J. R. Williams



OUT OUR WAY BY J. R. WILLIAMS