

Interesting information about them supplied by the Bureau of Biological Survey of the United States Department of Agriculture

Yellow-Bellied Sapsucker (Sphyrapicus varius)

Length, about eight and one-half inches. Only woodpecker having top of head from base of bill red, combined with a black patch on breast.

Range: Breeds in northern half of the United States and southern half of Canada; winters in most of the states and south to Costa Rica.

Habits and economic status: The yellow-bellied sapsucker is rather silent and suspicious and generally man ages to have a tree between himself and the observer. Hence the bird is its appearance. The regular girdles of holes made by this bird are common on a great variety of trees; in all about 250 kinds are known to be attacked. Occasionally young trees are punctures. These blemishes, which are



known as bird pecks, are especially numerous in hickory, oak, cypress, and yellow poplar. Defects due to sapsucker work cause an annual loss to the lumber industry estimated at \$1,-250,000. The food of the vellow-bellied sapsucker is about half animal Its fondness for and hair vegetable. ants counts slightly in its favor. It eats also wasps, beetles (including. however, very few wood-boring species), bugs, and spiders. The two principal components of the vegetable food are wild fruits of no importance and cambium (the layer just beneath the bark of trees). In securing the cambium the bird does the damage above described. The yellow-bellied sapsucker, unlike other woodpeckers thus does comparatively little good and much harm.

Rose-Breasted Grosbeak (Zamelodia ludoviciana)

Length, eight inches. Range: Breeds from Kansas, Ohio, Georgia (mountains), and New Jersey, north to southern Canada; winters from Mexico to South America. Habits and economic status: This beautiful grosbeak is noted for its

clear, melodious notes, which are

poured forth in generous measure. The



rosebreast sings even at midday dur ing summer, when the intense heat has silenced almost every other songster. Its beautiful plumage and sweet song are not its sole claim on our favor, for few birds are more some damage to fruit. But this mischief is much more than balanced by tenth of the total food of the rosepest. It vigorously attacks cucumber possible means. beetles and many of the scale insects. It proved an active enemy of the Rocky mountain locust during that the other pests it consumes are the

and forest tent caterpillars, tussock, gipsy, and brown-tall moths, plum curculio, army worm, and chinch bug. In fact, not one of our birds has a better record.

Purple Martin (Progne subis)

Length, about eight inches. Breeds throughout the United States and southern Canada, south to central Mexico; winters in South America.

Habits and economic status: This is the largest as it is one of the most much better known by its work than beautiful of the swallow tribe. It formerly built its nests in cavities of trees, as it still does in wild districts, but learning that man was a friend it soon adopted domestic habits. Its presence about the farm can often killed outright, but more loss is caused be secured by erecting houses suitby stains and other blemishes in the able for nesting sites and protecting wood which result from sapsucker them from usurpation by the English sparrow, and every effort should be made to increase the number of colonies of this very useful bird. The boxes should be at a reasonable height, say 15 feet from the ground, and made inaccessible to cats. A colony of these birds on a farm makes great inroads upon the insect population, as the birds not only themselves feed upon insects but rear their young upon the same diet. Fifty years ago in New England it was not uncommon to see colonies of 50 pairs of martins, but most of them have now vanished for no apparent reason except that the martin houses have decaved and have not been renewed. More than three-fourths of this bird's



food consists of wasps, bugs, and beetles, their importance being in the order given. The beetles include several species of harmful weevils, as the clover-leaf weevils and the nut weevils. Besides these are many crane flies, moths, May flies, and dragonflies.

Cooper's Hawk (Accipter cooperi)

Length, about fifteen inches. Medium sized, with long tail and short wings, and without the white patch on rump which is characteristic of the marsh hawk.

Range: Breeds throughout most of the United States and southern Canada; winters from the United States to Costa Rica.

Habits and economic status: The Cooper's hawk, or "blue darter," as it is familiarly known throughout the South, is pre-eminently a poultry and bird-eating species, and its destructiveness in this direction is surpassed only by that of its larger congener, the goshawk, which occasionally in autumn and winter enters the United States from the North in great numbers. The almost universal prejudice against birds of prey is largely due to the activities of these two birds, assisted by a third, the sharp-shinned hawk, which in habits and appearance



might well pass for a small Cooper's beneficial to agriculture. The rose hawk. These birds usually approach breast eats some green peas and does under cover and drop upon unsuspecting victims, making great inroads upon poultry yards and game coverts the destruction of insect pests. The favorably situated for this style of bird is so fond of the Colorado potato hunting. Out of 123 stomachs exambeetle that it has earned the name of ined, 38 contained the remains of "potato-bug bird," and no less than a mammals. Twenty-eight species of wild birds were identified in the abovebreasts examined consists of potato mentioned material. This destructive beetles-evidence that the bird is one hawk, together with its two near relaof the most important enemies of the tives, should be destroyed by every

Patience Needed for Success. The advertiser who loses his painsect's ruinous invasions, and among tience will lose out. The masses who read advertisements move slowly.spring and fall cankerworms, orchard | Mail Order Journal.

UNPROFITABLE ACRES FATAL TO SUCCESS



Fir and Cedar Stump Land-Good Soil, But Very Expensive to Clear.

(Prepared by tre United States Department of Agriculture.

"Low-yielding acres, like boarder farming," according to J. C. McDowell of the office of farm management. United States department of agricul ture, in the new year book. "Our farm survey records show that areas of poorly drained, compact and sour soils, or soils low in humus, greatly reduce net profits. Sometimes these cent of the entire farm acreage does not produce enough to pay its way.

"One farm in Wisconsin, on which records were recently taken, has 40 acres of poorly drained land that in its present condition is practically worthless. Twenty-five dollars per acre spent in drainage will make this 40-acre tract the equal of any in that district, and good land is selling there at \$150 per acre. A small portion of similar land on this farm has already been tile-drained and is now producing a fair profit on each acre so improved.

"The successful business man al ways tries to weed out all unprofitable enterprises and to expand those that pay a profit. Unprofitable acres cangot always be disposed of as readily as boarder cows, but usually they can be improved until they become profit pearing. If the income from such land cannot be increased it is quite possiole that the labor spent upon it can be reduced until the income at least pays a little more than the cost of

Itemize Before Purchasing.

"In buying a farm, unprofitable cres that cannot easily be made proftable should ordinarily be considered as having little or no agricultural ralue. They may even be a burden o their owner, in which case they have a negative value. A farmer was about to buy a quarter-section farm



Stony Land-Very Hard to Clear and Not Worth Much When Cleared.

n the corn belt at \$100 per acre. This appeared to him to be a very reasonable price for a farm in that region, until a careful analysis of the proposition called his attention to the large amount of waste land on the farm Actual measurements and careful es timates furnished the following data:

90 acres rich, sandy loam, not stony, not rough, gently sloping, well drained; actual value \$125 per acre; rough, hilly, probably of little or

agricultural value; actual value is acres poor pasture land, wet land that can be drained, but that cannot be drained at a profit; actual value \$10 per acre: \$10×35

Buildings 2.45

"These figures gave the farm, including buildings, a value of \$80 per acre. though a part of it was worth considerably more than the average price per acre asked for the farm. An itemized study of the farm, acre by acre, and a detal'ed study of fences, buildings and other improvements, should always be made before purchasing. Such investigation often calls atten-

Utilization of Unprofitable Acres. "To what extent and at what rate

tion to enough unprofitable acres to

stop the sale.

we should attempt to decrease the number of unprofitable acres depends largely on the increased demand for agricultural products. The law of diminishing returns prevents the reclamation of waste land until the rising prices or cheaper methods of production make such action practicable. Frequently it pays better to spend time and money in the further improvement of acres that are now profitable rather than in the reclamation tightened cannot get out of the groove. of less desirable land.

"Much money and valuable time is lost each year in almost every locality in the attempt to put unprofitable cows, are often fatal to successful acres on a paying basis. Lack of satisfactory agricultural credit forces many a deserving family to waste time in trying to get a start on acres that moneyed men pass by. Misleading advertisements and inflated magazine articles have lured many a family to give up a comfortable living in the city to drag out a miserable existence in records show that as much as 30 per toil and worry on worthless land. Lack of knowledge of the business side of farming is largely responsible for loss in the management of unprofitable acres. The problem of how to prevent a waste of money, time and energy in the attempt to develop worthless land is worthy of careful study. At best such waste can only partially be prevented. The pity of it is that so much of this loss falls on those the can least afford to lose.

"Every farmer who owns unprofitable land should make a detailed examination of his farm, acre by acre, to detect all unprofitable areas. Next. he should determine the approximate cost of making each acre pay its way. Such study will disclose what and how much is needed in the way of manure, commercial fertilizer, drainage or other preparation, to produce satisfactory crop yields. This analytical study of each portion of the farm will sometimes call attention to many acres that cannot be cultivated profitably. It is better to leave such land in permanent pasture, or even to let it lie idle, than to work it at a loss. The farm not only furnishes a home, but it is a place of business. As such, each enterprise and acre should receive individual attention, and, so far as practicable, the entire farm should be placed on a paying basis."

ERADICATION OF CORN SMUT

Only Method Is to Cut Off Smutty Stalks and Burn Them-No Treatment of Seed.

(By O. M. ALLYN, Illinois Experiment Station.)

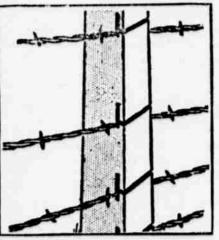
There is no treatment of seed corn for smut. The spores which cause smut in corn live over from one year until the next in manure, soil, refuse, etc. In the summer, under favorable conditions these spores which may have wintered in the soil or may have been hauled to the field in the manure. find lodgment on the tender parts of the corn plant, usually by the action of the wind, and start to grow.

The source of the spore is not the seed corn, therefore, treatment will do no good. The only method of eradication is to cut off the smutty stalks and burn them. This, of course, is impractical.

FASTENING WIRES TO POST

Difficult Problem Said to Have Been Successfully Worked Out-Idea Looks Sensible.

A new way to fasten the wires to concrete posts is being tried out successfully, it is claimed. If it works well a real triumph will have been



Wires Fastened to Post.

won, for the question of how to fasten wire to concrete posts has been a difficult one.

The new device consists of a slot made at an angle in the post, while a vertical slit is made to connect with the outside cut. The wire is placed in the slot while loose, and when The idea looks sensible.

DAIRYING IN **WESTERN CANADA**

Accompanying Industries Also Prove Highly Profitable.

The cheese industry throughout western Canada teday is in a highly flourishing condition and is bound in s very short time to become much more important. The war has created s great demand for that article, and its use abroad has given it a lot of useful advertising. The article known as Canadian cheese is now sought not only by the soldier in the trenches. but by the ordinary civilian consumer. who, having used it, is quick to ap preclate its value. This means that atter the war there will be a demand created for it that would not other wise have been. Up to the present the war needs have limited the local supply, but with the increased effort that is now being put forth it is hoped that this will be met. As a matter of course the prices are high, and the farmers who contribute to the cheese factories are making money.

The cheese season is now fully open and there is every prospect of an excellent year because the high price which obtained last year will undoubt edly be maintained this season. West ern Canada has all the natural resources for the making of cheese, the feed and the cool nights, two things essential, and in time it is bound to become one of the finest cheese countries of the continent.

The lower foothills of Alberta, used only at the present time as ranges or for no purpose, will in time produce cheese in great quantities, and doubtless will soon equal the famous uplands of Denmark.

The cool nights mean the better keeping of milk and cream and cheese, and that is a great thing for the industry, especially when combined with possibilities of cattle feed such as exist on the long slopes from the Rockies eastward.

The hog market, which may be classed as an adjunct of farming, is an exceedingly good one, and the low cost at which the feed can be produced, coupled with the high prices realized, make this industry "ery prof-

One of the first thoughts that occur to the mind of the average prospective settler is the likelihood of suitable markets. In this connection the following table will be illuminating. It is supplied by the P. Burns company, because they are unable to recognize packers and exporters of Calgary, and shows the average monthly price paid for hogs for the six years 1910 to 1915 inclusive. When one considers the low initial cost of the land and the small overhead cost of maintenance and feed, these prices challenge compari-

191	0 1911	1912	1913	1914	1915
January					\$6.71
Feb	7%	814	814	8	6.96
March	7%	8	814	71/4	7.16
April	71/4	814	8%	71/2	8.06
May		9			
June		81/2	8	6.85	8.30
July	71/4	81/2	8	8	8.12
August8		8%	814	81/4	7.93
Sept8	200	9	8%	734	8.86
Oct8	81/4	81/4			9.02
Nov7	% 9	81/2	7	61/4	8.36
Dec7	% 8%	81/4	714	61/4	8.70%
				and the	

A farmer of Monarch, Alberta. claims the distinction of being the first in the province to sell a carload of hogs at the high price of eleven cents a pound, live weight. The sale was made a short time ago at Calgary, and at that time was a record, although prices have since gone as high as \$11.121/2 per hundredweight. With such prices available for hogs the farmer has a market for everything Lis farm produces, as there is practically no farm product which cannot be converted into good hog flesh. The uncertainty of results which attends grain farming even under most favorable conditions is removed when the settler goes in for raising hogs, beef and dairy products. With Western Canada's cheap lands, heavy crops, and climate free from diseases of stock. the stock farmer is as sure of success as anyone can be.-Advertisement.

While a man is trying to make his fortune a woman goes and gets hers Head.

People naturally assume that a handsome woman marries a homely man because he has a lot of money.

St. Paul is to have a new family hotel to cost \$400,000.

And prevents others having the disease no matter how exposed. 50 cents and \$1 a bottle, \$5 and \$10 a dosen bottles. All good druggists and turf goods houses. SPOHN MEDICAL CO., Chemists and Bacteriologists, Goshen, Ind., U. S. A.

GALLSTONES perations. Positive remedy—FREE

-Results sure Write for our FREE
k of Truth and Facts To-lay,
Remedy Co., Dept. C-60, 2195, Dearborn St., Chicago

W. N. U., LINCOLN, NO. 23-1916.

WIFE TOO ILL TO WORK

IN BED MOST OF TIME

Her Health Restored by Lydia E. Pinkham's Vegetable Compound.

Indianapolis, Indiana. - "My health was so poor and my constitution so run



down that I could not work. I was thin, pale and weak, weighed but 109 pounds and was in bed most of the time. I began taking Lydia E. Pinkham's Vegetable Compound and five months later I weighed 133 pounds. I do all the house-

work and washing for eleven and I can truthfully say Lydia E. Pinkham's Vegetable Compound has been a godsend to me for I would have been in my grave today but for it. I would tell all women suffering as I was to try your valuable remedy. '- Mrs. WM. GREEN, 332 S. Addison Street, Indianapolis, Indiana. There is hardly a neighborhood in this

country, wherein some woman has not found health by using this good oldfashioned root and herb remedy. If there is anything about which you

would like special advice, write to the Lydia E. Pinkham Medicine Co., Lynn,

Love Finds a Way.

"But your flance has such a small salary; hew are you going to live?" "Oh, we're going to economize. We're going to do without such a lot of things that Jack needs,"

Examine carefully every bottle of CASTORIA, a safe and sure remedy for infants and children, and see that it

Bears the Signature of Charly Telehors In Use for Over 30 Years. Children Crv for Fletcher's Castoria

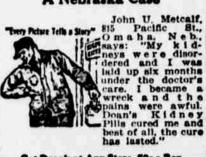
A regular woman is always glad when her husband has a holiday, so that he can put in about eighteen hours doing odd jobs at home.

Some people never have a chance one when they see it.

Makes Hard Work Harder

A bad back makes a day's work twice as hard. Backache usually comes from weak kidneys, and if headaches, dizziness or urinary dishelp before the kidney disease takes a grip-before dropsy, gravel or Bright's disease sets in. Doan's Kidney Pills have brought new life and new strength to thousands of working men and women. Used and recommended the world over.

A Nebraska Case



Get Doan's at Any Store, 50c a Bes DOAN'S RIDNEY POSTER-MILBURN CO., BUFFALO, N. Y

The Wretchedness of Constipation Can quickly be overcome by CARTER'S LITTLE

LIVER PILLS. Purely vegetable -act surely and gently on the liver. Cure Biliousness, Dizzi-

ness, and Indigestion. They do their duty. SMALL PILL, SMALL DOSE, SMALL PRICE. Genuine must bear Signature





FOR PERSONAL HYGIENE pelvic catarrh, ulceration and inflam-mation. Recommended by Lydia E. Pinkham Med. Co, for ten years. A healing wonder for nasal catarrh, sore throat and sore eyes. Economical. Has extraordinary cleaning and semicidal power.