

MEADOW LARK EATS MANY FARM PESTS



Meadow Lark (Sturnella Magna.)

(Prepared by the United States Department of Agriculture.)

May is the month when the meadow lark does some of its best work in aiding the farmer, for that is when the outcrops begin their career, and this little bird devours them by thousands. It also eats many caterpillars, and in the same month these creatures form over 24 per cent of its whole diet. Caterpillars which are ground feeders are often overlooked by birds which habitually frequent trees, but they do not escape the meadow lark. Ants, wasps, spiders, and chinch bugs are other harmful pests eaten by this feathered friend of humanity.

In 1,514 stomachs of the meadow lark examined, animal food (practically all insects) constituted 74 per cent of the contents and vegetable matter 26 per cent. As would naturally be supposed, the insects were ground species, as beetles, bugs, grasshoppers and caterpillars, with a few flies and wasps and spiders. A number of the stomachs were collected when the ground was covered with snow, but even these contained a large percentage of insects, showing the bird's skill in finding proper food under adverse circumstances.

Of the various insects eaten, crickets and grasshoppers are the most important, constituting 26 per cent of the food of the year and 72 per cent of the food in August. It is scarcely necessary to mention the beneficial effect of a number of these birds on a field of grass in the height of the grasshopper season. Of the 1,514 stomachs collected at all seasons of the year, 778, or more than half, contained remains of grasshoppers, and one was filled with fragments of 37 of these insects. This seems to show conclusively that grasshoppers are preferred, and are eaten whenever they can be found. Especially notable is the great number taken in August, the month when grasshoppers reach their maximum abundance.

Next to grasshoppers, beetles make up the most important item of the meadow lark's food, amounting to 25 per cent, about one-half of which are predaceous ground beetles. The others are of harmful species.

Forty-two individuals of different kinds of May beetles were found in the stomachs of meadow larks, and there were probably many more which were past recognition. To this form and several closely allied ones belong the numerous white grubs, which are among the worst enemies to many cultivated crops, notably grasses and grains, and to a less extent strawberries and garden vegetables. In the larval stage they eat the roots of these plants, and being large, one individual may destroy several plants. In the adult stage they feed upon the foliage of trees and other plants, and in this way add to the damage which they began in the earlier form. As these enemies of husbandry are not easily destroyed by man, it is obviously wise to encourage their natural foes.

Among the weevils found in the stomachs the most important economically are the cotton-boll weevil and the recently introduced alfalfa weevil of Utah. Several hundred meadow larks were taken in the cotton-growing region, and the boll weevil was found in 25 stomachs of the eastern meadow lark and in 15 of the western species. Of the former, one stomach contained 27 individuals. Of 25 stomachs of western meadow larks taken in alfalfa fields of Utah, 15 contained the alfalfa weevil.

The vegetable food consists of grain and weed and other hard seeds. Grain in general amounts to 11 per cent and weed and other seeds to seven per cent. Grain, principally corn, is eaten mostly in winter and early spring and consists, therefore, of waste kernels; only a trifle is consumed in summer and autumn when it is most plentiful. No trace of sprouting grain was discovered. Clover seed was found in only six stomachs, and but little in each. Seeds of weeds, principally rag-

weed, barnyard grass, and smartweed, are eaten from November to April, inclusive, but during the rest of the year are replaced by insects.

Briefly stated more than half of the meadow lark's food consists of harmful insects; its vegetable food is composed either of noxious weeds or waste grain, and the remainder is made up of useful beetles or neutral insects and spiders. A strong point in the bird's favor is that, although naturally an insect eater, it is able to subsist on vegetable food, and consequently is not forced to migrate in cold weather farther than is necessary to find grounds free from snow.

The eastern meadow lark is a common and well-known bird, occurring from the Atlantic coast to the great plains, where it gives way to the closely-related western species, which extends thence westward to the Pacific. It winters from our southern border as far north as the District of Columbia, southern Illinois, and occasionally Iowa. The western form winters somewhat farther north. Although it is a bird of the plains, and finds its most congenial haunts in the prairies of the West, it is at home wherever there is level or undulating land covered with grass or weeds, with plenty of water at hand.

"Some Common Birds Useful to the Farmer" is a new Farmers' Bulletin (No. 639) of the United States department of agriculture, which describes this and other interesting and valuable birds.

FOREIGN BODIES AND CATTLE

More Care Should Be Taken to See That Animals Do Not Eat Nails and Pieces of Wire.

(By I. E. NEWSOM, Colorado Agricultural College.)

The average person does not seem to realize how many good cattle die from foreign bodies such as nails and pieces of wire that pass through the second stomach forward in the heart sac. More cattle, particularly those which are kept up around the cities, pick up foreign bodies in their food and these are nearly always deposited in the second stomach. This stomach lies just back of the diaphragm, whereas the heart lies just in front and on the opposite side of this partition. Consequently, if one of these sharp bodies starts forward, owing to the movements of the stomach, it is very apt to pierce the heart sac. This carries infection and the heart sac fills with pus; finally after some weeks or even months the animal shows symptoms of disease and dies, even without the owner knowing the real cause of the difficulty.

Prevention is not easy, but more care should be taken to see that the cattle do not eat out of the mangers or in feed lots where there are many nails and pieces of wire. It is not at all uncommon to find twenty-five or thirty nails in the stomach of a cow. There has been some hard fighting in the desert, around about Dibrail. The troops commanded by Captain de Sabron were routed by the natives at noon on Thursday. They did not rally and were forced to retreat. There was a great loss of life among the natives and several of the regiment were also killed. There has been no late or authentic news from Dibrail, but the last dispatches give the impression of war to understand that Sabron himself is among the retreating.

FOR SUCCESS WITH TURKEYS

Young Poults Should Be Penned Up for First Week or Two—Give Old Ones Free Range.

There is no doubt but grown turkeys must have free range to make any success with them, but I believe that the young poults should be penned up for the first week or so, as the mother turkey hen always starts out too early in the morning, and the dew gives the young ones a chill and as a consequence many of the poults are lost.

So many advocate, "there's nothing like giving the turkeys free range with their poults." This may be entirely all right in a dry season, but the morning dew and sudden rain showers are apt to catch you any time and a number in my vicinity lost over half of their free-range poults last year on account of the sudden rains and heavy dew during the hatching season.

HIS LOVE STORY

MARIE VAN VORST
ILLUSTRATIONS BY RAY WALTERS

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SYNOPSIS.

Le Comte de Sabron, captain of French cavalry, takes to his quarters to raise by hand a motherless Irish terrier pup, and names it Pitchoune. He dines with the Marquise d'Esclagnac and meets Miss Julia Redmond, American heiress, who sings for him an English ballad that lingers in his memory. Sabron is ordered to Algiers, but is not allowed to take servants or dogs. Miss Redmond offers to take care of the dog during his master's absence, but Pitchoune, homesick for his master, runs away from her. The Marquise plans to marry Julia to the Duc de Tremont. Unknown to Sabron, Pitchoune follows him to Algiers. Duke and master meet and Sabron gets permission from the war minister to keep his dog with him. Julia writes him that Pitchoune has run away from her. He writes Julia of Pitchoune. The Duc de Tremont finds the American heiress captivated.

CHAPTER XII—Continued.

"My dear Julia," she said to the beautiful girl, looking at her through her lorgnon; "I don't understand you. Every one of your family has married a title. We have not thought that we could do better with our money than build up fortunes already started; than in preserving noble races and noble names. There has never been a divorce in our family. I am a marquise, your cousin is a countess, your aunt is one of the peeresses of England, and as for you, my dear

Miss Redmond was standing by the piano. She had lifted the cover and was about to sit down to play. She smiled slightly at her aunt, and seemed in the moment to be the older woman.

"There are titles and titles, ma tante; the only question is what kind do you value the most?"

"The highest!" said her aunt without hesitation, "and the Duc de Tremont is undoubtedly one of the most famous parts in Europe."

"He will then find no difficulty in marrying," said the young girl, "and I do not wish to marry a man I do not love."

She sat down at the piano and her hands touched the keys. Her aunt, who was doing some dainty tapestry, whose fingers were creating silken flowers and whose mind was busy with fancies and ambitions very like the work she created, shrugged her shoulders.

"That seems to be," she said keenly, "the only tune you know, Julia."

"It's a pretty song, ma tante."

"I remember that you played and sang it the first night Sabron came to dinner." The girl continued to finger among the chords. "And since then never a day passes that sometime or other you do not play it through."

"It has become a sort of oraison, ma tante."

"Sabron," said the marquise, "is a fine young man, my child, but he has nothing but his officer's pay. Moreover, a soldier's life is a precarious one."

Julia Redmond played the song softly through.

The old butler came in with the evening mail and the papers. The Marquise d'Esclagnac, with her embroidery scissors, opened Le Temps from Paris and began to read with her usual interest. She approached the little lamp on the table near her, unfolded the paper and looked over at her niece, and after a few moments, said with a slightly softened voice:

"Julia! Miss Redmond stopped playing. 'Julia! The girl rose from the piano stool and stood with her hand on the instrument."

"My dear Julia! Madame d'Esclagnac spread Le Temps out and put her hand on it. 'As I said to you, my child, the life of a soldier is a precarious one.'

"Ma tante," breathed Miss Redmond from where she stood. "Tell me what the news is from Africa. I think I know what you mean."

She could not trust herself to walk across the floor, for Julia Redmond in that moment of suspense found the room swimming.

"There has been an engagement," said the marquise gently, for in spite of her ambitions she loved her niece. "There has been an engagement, Julia, at Dibrail." She lifted the newspaper and held it before her face and read:

There has been some hard fighting in the desert, around about Dibrail. The troops commanded by Captain de Sabron were routed by the natives at noon on Thursday. They did not rally and were forced to retreat. There was a great loss of life among the natives and several of the regiment were also killed. There has been no late or authentic news from Dibrail, but the last dispatches give the impression of war to understand that Sabron himself is among the retreating.

The Marquise d'Esclagnac slowly put down the paper, and rose quickly. She went to the young girl's side and put her arm around her. Miss Redmond covered her face with her hands:

"Ma tante, ma tante!" she murmured.

"My dear Julia," said the old lady, "there is nothing more uncertain than newspaper reports, especially those that come from the African seat of war. Sit down here, my child."

The two women sat together on the long piano stool. The marquise said: "I followed the fortunes, my dear, of my husband's cousin through the engagement in Tonkin. I know a little what it was." The girl was immov-

able. Her aunt felt her rigid by her side. "I told you," she murmured, "that a soldier's life was a precarious one."

Miss Redmond threw away all disguises. "Ma tante," she said in a hard voice. "I love him! You must have known it and seen it. I love him! He is becoming my life."

As the marquise looked at the girl's face and saw her trembling lips and her wide eyes, she renounced her ambitions for Julia Redmond. She renounced them with a sigh, but she was a woman of the world, and more than that, a true woman. She remained for a moment in silence, holding Julia's hands.

She had followed the campaign of her husband's cousin, a young man who had not married. In this moment she relived again the arrival of the evening papers; the dispatches, her husband's news of his cousin. As she kissed Julia's cheeks a moisture passed over her own eyes, which for many years had shed no tears.

"Courage, my dear," she implored. "We will telegraph at once to the minister of war for news."

The girl drew a convulsive breath and turned, and leaning both elbows on the piano keys—perhaps in the very notes whose music in the little song had charmed Sabron—she burst into tears. The marquise rose and passed out of the room to send a man with a dispatch to Tarascon.

CHAPTER XIII.

One Dog's Day.

There must be a real philosophy in all proverbs. "Every dog has his day" is a significant one. It surely was for Pitchoune. He had his day. It was a glorious one, a terrible one, a memorable one, and he played his little part in it. He awoke at the gray dawn, springing like a flash from the foot of Sabron's bed, where he lay asleep, in response to the sound of the reveille, and Sabron sprang up after him.

Pitchoune in a few moments was in the center of real disorder. All he knew was that he followed his master



Pitchoune Smelled Him From Head to Foot.

all day long. The dog's knowledge did not comprehend the fact that not only had the native village, of which his master spoke in his letter to Miss Redmond, been destroyed, but that Sabron's regiment itself was menaced by a concerted and concentrated attack from an entire tribe, led by a fanatic as hot-headed and as fierce as the Mahdi of Sudanese history.

Pitchoune followed at the heels of his master's horse. No one paid any attention to him. Heaven knows why he was not trampled to death, but he was not. No one trod on him; no horse's hoof hit his little wiry form that managed in the midst of carnage and death to keep itself secure and his tale whole. He smelt the gunpowder, he smelt the smoke, sniffed at it, threw up his pretty head and barked, puffed and panted, yelped and tore about and followed. He was not conscious of anything but that Sabron was in motion; that Sabron, his beloved master, was in action of some kind or other and he, a soldier's dog, was in action, too. He howled at fierce dark faces, when he saw them. He snarled at the bullets that whistled around his ears and, laying his little ears back, he shook his black muzzle in the very grin of death.

Sabron's horse was shot under him, and then Pitchoune saw his master, sprang upon him, and his feelings were not hurt that no attention was paid him, that not even his name was called, and as Sabron struggled on, Pitchoune followed. It was his day; he was fighting the natives; he was part of a title; he was a soldier's dog! Little by little the creatures and things around him grew fewer, the smoke cleared and rolled away, there were a few feet of freedom around him in which he stood and

barked; then he was off again close to his master's heels and not too soon. He did not know the blow that struck Sabron, but he saw him fall, and then there came into his canine heart some knowledge of the importance of his day. He had raced himself weary. Every bone in his little body ached with fatigue.

Sabron lay his length on the bed of a dried-up river, one of those phantom-like channels of a desert stream whose course runs watery only certain times of the year. Sabron, wounded in the abdomen, lay on his side. Pitchoune smelled him from head to foot, addressed himself to his restoration in his own way. He licked his face and hands and ears, sat sentinel at the beloved head where the forehead was covered with sweat and blood. He barked feverishly and his attentive ears there came no answer whatsoever, either from the wounded man in the bed of the African river or from the silent plains.

Sabron was deserted. He had fallen and not been missed and his regiment, routed by the Arabs, had been driven into retreat. Finally the little dog, who knew by instinct that life remained in his master's body, set himself at work vigorously to awaken a sign of life. He attacked Sabron's shoulder as though it were a prey; he worried him, barked in his ear, struck him lightly with his paw, and finally, awakening to dreadful pain, to fever and to isolation, awakening perhaps to the battle for life, to the attentions of his friend, the spahi opened his eyes.

Sabron's wound was serious, but his body was vigorous, strong and healthy, and his mind more so. There was a film over it just now. He raised himself with great effort, and in a moment realized where he was and that to linger there was a horrible death. On each side of the river rose an inclined bank, not very high and thickly grown with mimosa bush. This meant to him that beyond it and probably within easy reach, there would be shade from the intense and dreadful glare beating down upon him, with death in every ray. He groaned and Pitchoune's voice answered him. Sabron paid no attention to his dog, did not even call his name. His mind, accustomed to quick decisions and to a matter-of-fact consideration of life, instantly took its proper course. He must get out of the river bed or die there, rot there.

What there was before him to do was so stupendous an undertaking that it made him almost unconscious of the pain in his loins. He could not stand, could not thoroughly raise himself; but by great and painful effort, bleeding at every move, he could crawl; he did so, and the sun beat down upon him. Pitchoune walked by his side, whining, talking to him, encouraging him, and the spahi, ashen pale, his bright gray uniform ripped and stained, all alone in the desert, with death above him and death on every hand, crawled, dragged, hitched along out of the river to the bank, cheered, encouraged by his little dog.

For a drop of water he would have given—oh, what had he to give? For a little shade he would have given—about all he had to give had been given to his duty in this engagement which could never bring him glory, or distinction or any renown. The work of a spahi with a native regiment is not a very glorious affair. He was simply an officer who fell doing his daily work.

Pitchoune barked and cried out to him: "Courage!"

"I shall die here at the foot of the mimosa," Sabron thought; and his hands hardly had the courage or strength to grasp the first bushes by which he meant to pull himself up on the bank. The little dog was close to him, leaping, springing near him, and Sabron did not know how tired and thirsty and exhausted his brave little companion was, or that perhaps in that heroic little body there was as much of a soldier's soul as in his own human form.

The sun was so hot that it seemed to sing in the bushes. Its torrid fever struck on his brown, struck on his chest; why did it not kill him? He was not even delirious, and yet the bushes sang dry and crackling. What was their melody? He knew it. Just one melody haunted him always, and now he knew the words: they were a prayer for safety.

(TO BE CONTINUED.)

Civilization's Peril.

America is closer to the heart of Europe than at any time since England's colonies became independent states. To the most isolated farmhouse it has been known for a half year that we are not remote from the portentous events beyond the sea; that the fate of our brothers over there, in some way which we do not well discern, involves us also. We are, whether we like it or not, full shareholders in the civilization which is imperiled. Our commerce and industry, our prosperity and well-being, our culture and religion, the foundations of our common humanity, and the ideals of our common aspirations, are all at stake.—Edward T. Devine in the Survey.

Child Research Work.

Miss Elizabeth Moore of St. Louis, who is a member of the children's bureau department of the government, has returned to Saginaw, Mich., to continue her investigations in regard to the women of the lumber camps and health of the children. Miss Julia Lathrop, head of the children's bureau, ordered Miss Moore to Indianapolis shortly after the holidays to assist in making preparations for a child welfare exhibition to be given in that city. Miss Moore was there ten days before returning to her regular work.

DANUBE IN HISTORY

River Has Always Been Great Highway of Commerce.

Dardanelles Has Ever Been Looked Upon as the Real Mouth of the Great Waterway of Eastern Europe, With Reason.

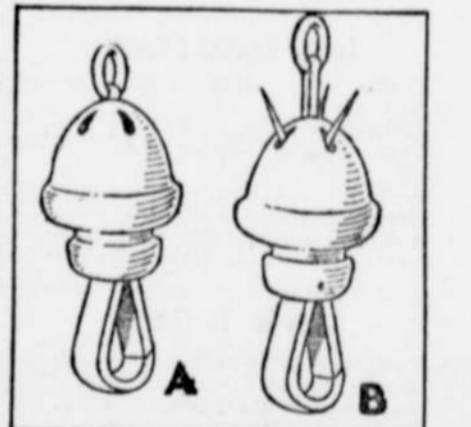
Probably most Americans know more about the Danube as the subject of a popular waltz than as a historic highway of commerce and a strategic frontier. Perhaps some of our readers were astonished to learn that the allied fleets are "opening the mouth of the Danube" by forcing the Dardanelles. They know that the Danube empties into the Black sea and cannot understand the statement. Technically, they are correct, but the Philadelphia Inquirer says, from time immemorial the Dardanelles has been looked upon as the real mouth of the great river of eastern Europe, and for the best of reasons.

In his will Caesar Augustus expressed a wish that Roman conquests should never proceed north of the Danube. He had succeeded in making that river a strategic frontier by adding a chain of forts which extended to the Swiss Alps. Behind this barrier were unknown hordes of savages and barbarians who were certain at some time by economic pressure or by a restless spirit to assault the integrity of the empire, and Augustus foresaw that any extension beyond this frontier would be dangerous. Unhappily, his advice was not accepted, although the reasons for a forward movement seemed excellent at the time. The imperial legions crossed the Danube, and the name Roumania remains as a relic of their forward movement. It proved a fatal mistake, for pretty soon the Danube became the danger spot of the empire and the seat of the government was transferred to Byzantium, the modern Constantinople. Gradually the Roman empire divided and fell under the oncoming rush of Goths, but the struggle along the Danube has continued to this day. Hun and Turk entered Europe along this great highway and were with difficulty turned back at Vienna. Since that time the Balkan question, with its control of the great river, has been dominant in European politics, and never was more important than today.

TO FOIL THE PICKPOCKET

Barbed Guard Is an Old Device, but It Is Guaranteed to Hold the Watch Secure.

Though patented so long ago that the patent has run out, the device for holding a watch secure from pickpockets, which is illustrated herewith, is so ingenious and so little known that it deserves to have attention called to it. It consists of a little acorn-shaped bulb between the hasp and the ring to which the chain is attached, and in this bulb three slender, sharp spikes that protrude the instant the chain is pulled. The spikes stick into the lining of the pocket, from which the watch cannot possibly be pulled. As soon as the pull is released the



A, the Watch as it Rests in the Pocket. B, the Same When the Chain is Pulled.

spikes drop back into tiny holes. The owner of the watch has to take hold of its ring and not of its chain when he wants to take it out.

Would Leave Bullet in Body.

"The mere presence of a bullet inside the body will of itself do no harm at all. The old idea that it will cause infection died long ago. . . . We now know that, provided they are clean, we can introduce steel plates, silver wires, silver nets, into the body without causing any trouble at all, and a bullet is no worse than any of these. It is a matter in which the public are very largely to blame, for they consider that unless the bullet has been removed the surgeon has not done his job. Unless he has some specific reason for it, I know that the surgeon who removes a bullet does not know his work.

"It may be the mark of a Scottish ancestor, but if ever I get a bullet in my own anatomy, I shall keep it."—A Surgeon in Belgium, by H. S. Souttar, F. R. C. S.

E Pluribus Unum.

Dribble—Hello, old boy! What are you doing now?

Scribble—Writing for the magazines.

Dribble—Don't you find it rather thankless sort of work?

Scribble—On the contrary, nearly everything I write is returned with thanks.