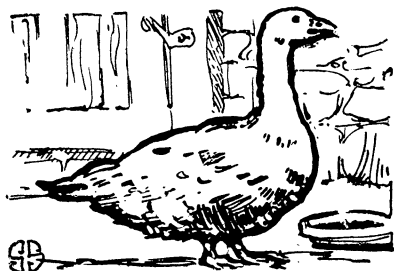


## NATURE RAMBLINGS

By FRANK THONE



## Holiday Goose

The Christmas holidays coming so soon after Thanksgiving, is rather hard on the poultry population. Many thousands of turkeys that escaped the late November massacre have lost their lives during the past few days and weeks.

Turkeys have been getting scarcer in this country of recent years, however, and the holiday goose is coming back into its own. Long before America was discovered, and with it the turkey, the goose held undisputed sway as the bird of the day at festal seasons. Even where turkeys are abundant there are many who prefer goose, for its flesh is moister and fatter than that of the American bird.

As the turkey is the most recent addition to the poultry yard, the goose was probably its first inhabitant, though possibly the duck might claim that honor. Both birds, as well as the common barnyard hen, were man's domestic companions long before the dawn of written history. The goose especially has had the esteem of primitive peoples, who dedicated it to one or another of their pagan gods. Even a nation of antiquity so recent and so civilized as Rome considered the goose sacred to Juno; the legend of the saving of the city by the alarmed cries of her flock at midnight is known to every one.

The goose is one of the most completely useable of all our domestic animals. Besides yielding a great lump of meat upon its involuntary demise, it gives us quantities of huge eggs before that event. It also supplies whole snowstorms of feathers and down for cushions and old-fashioned feather-beds, and can be plucked alive without apparent inconvenience. Finally, before the invention of metal pens, its quill-feathers made the best writing instruments; and before the invention of gunpowder those same stiff feathers winged the terrible clothyard shafts of the English archers. The

goose, falsely defamed as a foolish bird, was the means of conquering a way to peace, writing the treaty, furnishing the feast of amity and celebration, and at last supplying soft beds for the King and his men to sleep on afterwards.

Is it any wonder that a bird which has been so useful to Christians should be a favorite at Christmas?

Science News-Letter, December 31, 1927

## Katydid Concerts Timed

Katydids and crickets hear with their front legs. Such is the conclusion reached by Dr. B. B. Fulton of Iowa State College, after a close observation of prolonged vocal concerts participated in both by de-legged insect songsters and those with the full complement of extremities.

There are on the front legs of certain insects of the grasshopper family, organs similar in structure to those used for hearing by higher animals, Dr. Fulton explained to the association. Only the species having stridulatory or singing organs possess also the tympanum organs on the foremost pair of legs. Whether they actually serve this purpose or not, however, is a matter of much entomological wrangling, as are the functions of most of the senses in insects.

Dr. Fulton staged his first demonstration with ten male katydids commonly found on the prairies, placed in a cage where night after night they exhibited "almost perfect synchronization."

"The song of the group was continuous," stated the entomologist, "and as each individual started its series of notes anew it would fall in with the general cadence. It was only by detecting slight variations in the quality and volume of the chorus that one could be aware of the pauses in the individual songs. After observing the song of the whole group for two nights I removed four males to another cage at some distance from the first and with a small scissors cut off their front tibiae close to the femora."

The notes from these mutilated insects were not synchronized except as they happened to sound together at times, Dr. Fulton declared. He repeated the experiment with crickets and a species of Nebraska grasshoppers with the same results. The removal of the front legs did not injure the insects' health in any way, he was careful to explain, for those operated on lived as long as those

left intact. Grasshoppers frequently kick off one or both hind legs voluntarily to escape capture, he added.

Such a simultaneous sounding of notes as the uninjured insects produced can hardly be a matter of accident, said Dr. Fulton, and appears as conclusive evidence that they can hear each other.

Science News-Letter, December 31, 1927

## Fox Disease Like Human Ill

Causes of the epidemics that take off hundreds of valuable silver foxes on the fox farms of the West are beginning to come to light. One form of the fox disorders that have been known generally and vaguely under the term distemper, has been shown by Dr. R. G. Green and a group of collaborators at the University of Minnesota, to have many of the characteristics of encephalitis, a contagious inflammation of the brain.

Deaths from a simple epidemic of this malady have totalled more than 700, Dr. Green told members of the Society of American Bacteriology. Typical cases show weakness, convulsions and a lethargic state. The onset is usually sudden, while the animal dies within from one to three days after it is taken sick. The mortality of the disease as it occurs in nature runs from 10 to 25 per cent., but cases infected artificially in the laboratory are almost inevitably fatal. The causative agent has not yet been found, though a specific streptococcus is under suspicion.

The action of this causative factor seems to be neutralized by castor oil soap. Animals vaccinated by means of a soap-virus mixture appear to have resistance to artificial infection, Dr. Green declared.

Fur farmers throughout the country and in Canada are bending every effort to prevent contagious diseases in their foxes, while Dr. J. E. Shillinger of the U. S. Biological Survey has been sent to cooperate with Dr. Green in the research at the University of Minnesota.

Science News-Letter, December 31, 1927

Ancient man discovered the four methods of preserving food, namely by drying, heating, freezing, and use of antiseptics, such as salt and smoke, long before the day of written documents.

In producing the perfume of the rose, chemists combine toluene, a coal tar distillate which smells like gasoline, with chlorine, a poison war gas, and treat it with another poison, potassium cyanide.