# FOSSIL LEAF

by W. A. Gordon, University of Saskatchewan, Regina

Between sixty and seventy million years ago, a forested, warm temperate, freshwater swamp covered southern Saskatchewan and the adjoining parts of North Dakota and Montana. The specimen in the photograph provides part of the evidence for that swamp.

The specimen is believed to have been picked up from a lignite strip mining operation in North Dakota in 1968. It probably came from a mixed series of Paleocene age sands, clays, and lignite beds which in North Dakota are known as the Fort Union group and in Saskatchewan as the Ravenscrag Formation. These rocks are the principal commercial source of lignite in the Estevan area and in North Dakota. Fossils which have been found in these beds include crocodiles, crocodile-like reptiles, and turtles, as well as a variety of freshwater snails. A large flora is known, including alder, ash, cedar, elm, dogwood, fig, magnolia, oak, sequoia, sycamore, and walnut. The specimen in question is a large, fairly complete, sycamore-like leaf.

The forests and swamps of Ravenscrag (Fort Union) time were brought to an end by a gentle uplift of the plains region during the Eocene. This brought about a period of erosion instead of deposition. This is shown by the fact that later sediments in the area rest upon Ravenscrag (Fort Union) beds in an unconformable manner.



Theodore J. Binek, of Dickinson, North Dakota holding a fossil sycamore leaf.

# Junior Naturalists

Edited by Joyce Deutscher, 7200 6th Ave., Regina

### **NATURE HOBBIES**

by Helene White, Red Deer, Alberta

Here is an interesting hobby to wile away the long winter hours—make a collection of little people and animals to display different kinds of wood. The miniature men and animals shown in the illustration are less than three inches tall, but if you are making these wood carvings as toys for little children, you may want to make them somewhat larger.

The easiest figure to start with is the Christ Child lying in the manger hay. To make this figure, saw the wood to the length desired, then mark the face and cut down to the wood, removing the bark. The beardless shepherd boy with his crook is made in the same way, with arms glued on. For an easier fit, a longitudinal cut at the top of the arm (as shown in the inset) will help. To have hands, make two of these cuts (see illustra-



tion), or cut around the twig arm and peel off the bark (also as shown). The bearded men are just about as easy. For the beard, shave off the top layer of bark only, leaving the dark fibrous growth underneath, then proceed with the face.

All the animals and the birds have "peg" legs set into the bodies as illustrated. With the tip of your penknife gouge out the holes, then glue in the pegs. Ears and tails are either scraps of bark glued on, or wood chips left over from your whittling. The calf's tail is a strip of wood "feathered" at the end, while his head is a slice of wood whittled into a cork-like shape and glued cn. The fox and his tail are all one piece.

Do try to find as many different kinds of wood as possible and place

a label on the underside of each carving giving the name and place found. My sheep are papery white birch, while the fox is the young red-barked growth of the same tree. The shepherd boy is unpeeled poplar as is Mary, but her bell-shaped skirt is the result of a gall swelling. The calf is made of a poplar branch, peeled to expose the grain of the wood. This manner of showing the bark, the grain and colour of the wood, and an abnormality is novel and makes your collection interesting. Carving native animals such as the bear, deer, moose and elk in this way would certainly add further interest.

With the exception of the elk, all these animals live on a quarter section of land we bought this summer near Rochester, Alberta. Here one can still hear the lonely cry of the loon; birds beyond number live in the willows that grow along the tiny stream; poplar and birch border the creek bank and beaver pond, jackpine and spruce flourish in the muskeg. And they will always be there, for it is now a sanctuary, a gift to our wild friends, in appreciation of all they have taught us.

Another year has passed us by and it is time once again to wish you one and all a very Merry Christmas. This year I would like to send extra special greetings to the Saskatoon Junior Natural History Society for their aid to our feathered friends, and to the wonderful, friendly people of Rochester, Alberta.

### A STRANGE BIKD

by Dwight Hayes, age 10, Torch River

On September 18 while I was digging potatoes, I heard a strange bird call in the sunflowers. When I went over to look, I saw a large grey bird with black wings and a long black tail. I looked in my bird manual and wondered whether it might be a Clark's Nutcracker, although this friendly bird is not often found in Saskatchewan. The bird was also seen eating beside a pair of Blue Jays.

EDITOR'S NOTE: In general appearance, the Clark's Nutcracker and the Gray Jay are very similar, and of course the Gray Jay would be a common species in the woods at Torch River. Could Dwight's bird have been a Gray Jay?

## BIRD HOUSE PROJECT STARTED

by Brian Scott, age 14, Indian Head

This year I started building bird houses. In March I built eleven and put them up within a mile of our farm in early April. I set out the House Wren boxes in trees and the Tree Swallow houses on fence posts. House Sparrows nested in three houses around the yard. Only two boxes were unoccupied. I had three nests of Tree Swallows with seven young in each. My brother Lorne banded the young. House Wrens occupied three nests. I plan on building more nests this winter.

# LETTERS FROM JUNIORS WELCOMED

Please send your observations about nature to Mrs. Joyce Deutscher, 7200 6th Ave., Regina. Your observations, suggestions and comments are always welcome.

# Letters and Notes

### **BARN SWALLOWS**

I would like to report a pair of freeloaders that I saw riding on the Saskatchewan Department of Highways ferry at the Lancer Crossing on the South Saskatchewan River on August 21, 1969.

A pair of Barn Swallows had constructed a nest on top of a light reflector in a little shelter on the upstream side of the ferry. The ferryman told me they had brought off one brood of young and were incubating a second batch of eggs, which he was glad to see.—Clifford A. Matthews, Saskatoon.

### **AVIAN TELEGRAPH LINE**

Often during the nesting season the territory of a pair of birds will be invaded by a bird watcher who causes them to express their disapproval in a vociferous manner.

On July 5, 1969, while birding on one of the many nature trails in B.C.'s Manning Park, Park Naturalist Andrew Harcombe and I came upon the territory of a pair of Wilson's Warblers. As soon as they noticed us, they began sounding their familiar monosyllabic "check" note in rapid succession. This resulted in the following birds appearing: Mountain Chickadee