

# SHORTIA

## A NEWSLETTER

OF THE

## WESTERN CAROLINA BOTANICAL CLUB

### CONTENTS OF THIS ISSUE

	<u>Page</u>
A Trip to Cranberry Glades in West Virginia	1
A Light Note!	2
Endangered Species	3
The Wineberry	3
What about Ginseng?	4 - 5

— PUBLISHED QUARTERLY  
FOR THE CLUB —

EDITOR - HARVEY KROUSE

LITERARY CRITIC - VERNA KROUSE  
AND SECRETARY

## A TRIP TO CRANBERRY GLADES

Your editor would have much preferred to include field trip reports submitted by trip leaders or members, but no "letters to the editor" were received, although frequent appeals were made.

So, we will tell you about one trip four of us made to Cranberry Glades. We four, Ruby Harbison, botany teacher of Western Piedmont Community College, her friend, a school science teacher Allein Stanley, Verna, and I drove north into the mountains of southeastern West Virginia the last of June. Objective: To observe the most southern location of a bog having the characteristics and flora of muskeg bogs found in the glaciated areas of Michigan, New York, Pennsylvania, and Canada.

Cranberry Glades (bogs are called glades in West Virginia) has been known for many years and recognized and researched as being quite distinct by scientists of several disciplines.

Geologically, being a relatively flat area of some 400 acres, it was thought originally to have been a collection of shallow lakes surrounded by higher elevations. Subsequent stream drainage reduced their water levels.

During this transition the first vegetation consisted mostly of sphagnum moss which overspread the water. As it dies off each year the decayed moss falls to the bottom creating peat deposits as much as eleven feet in some places.

Explanation for establishment of northern type flora this far south is based upon the evidence that boreal vegetation was forced hundreds of miles south due to the low temperatures that prevailed during glacial periods. Apparently conditions of soils, water, and climates favored the perpetuation of many of these northern species in post glacial years in the area of Cranberry Glades.

Gradually other vegetation took over which has brought about three principal groups of plant life as they exist today: open glade areas, shrub communities, and bog forest.

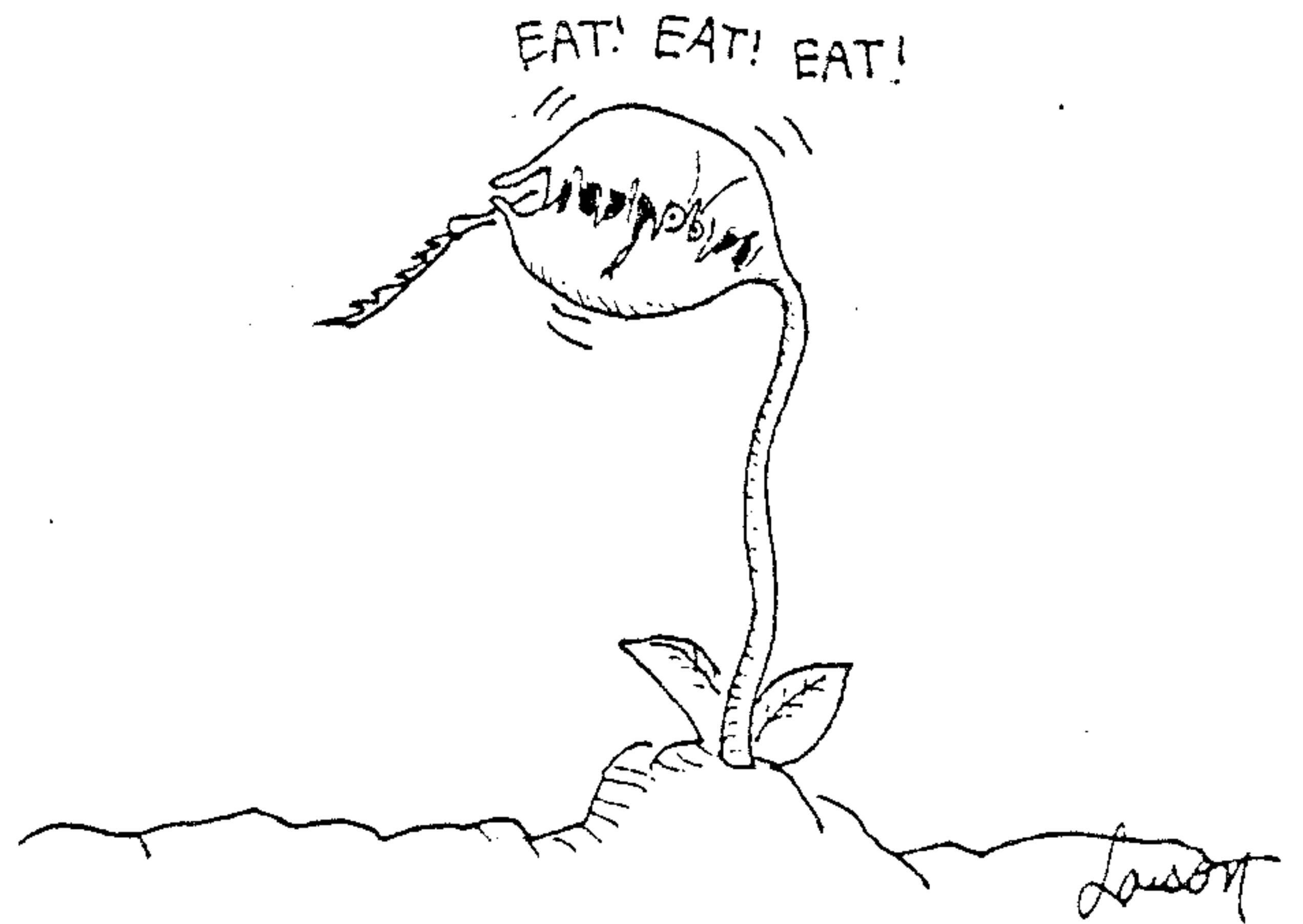
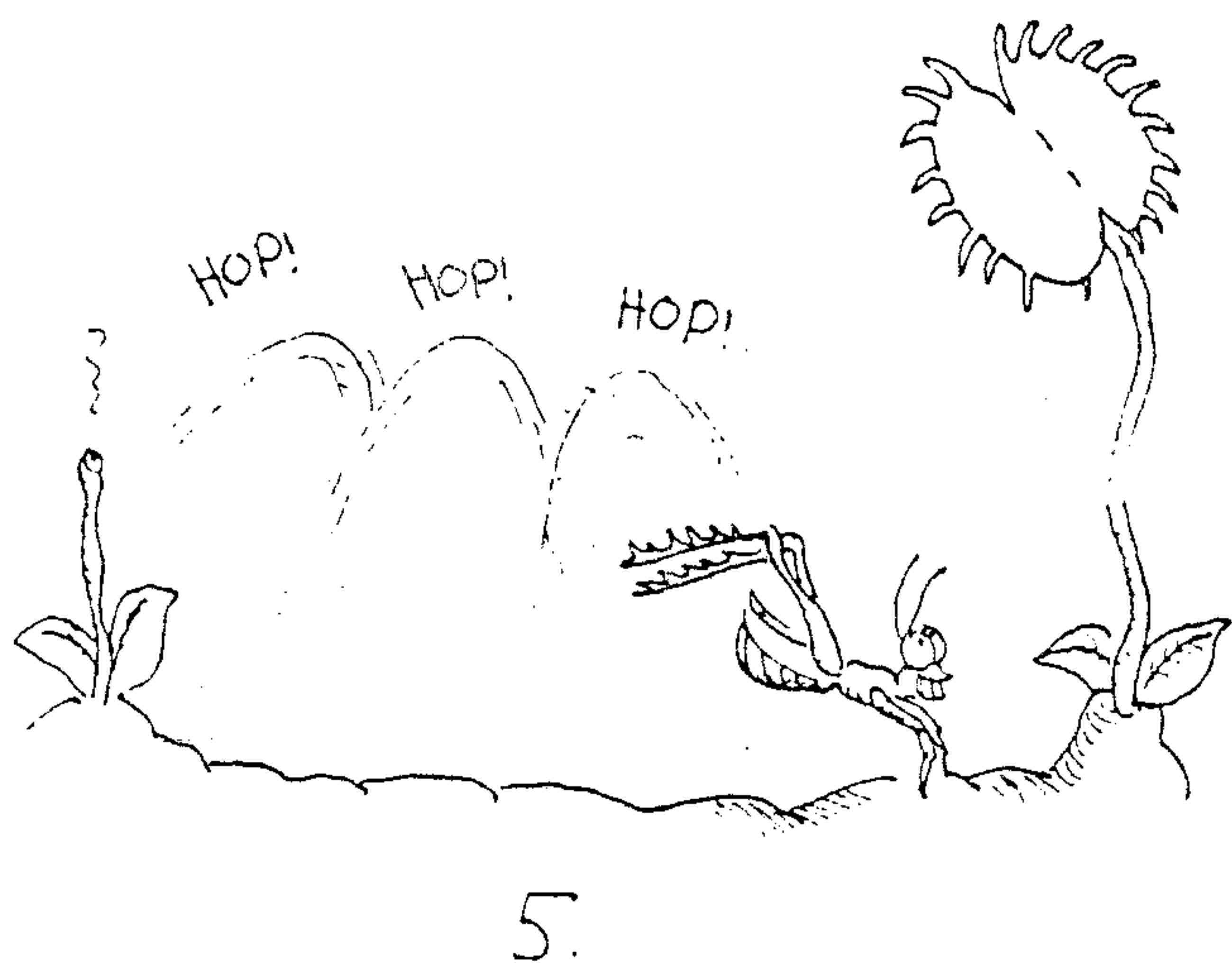
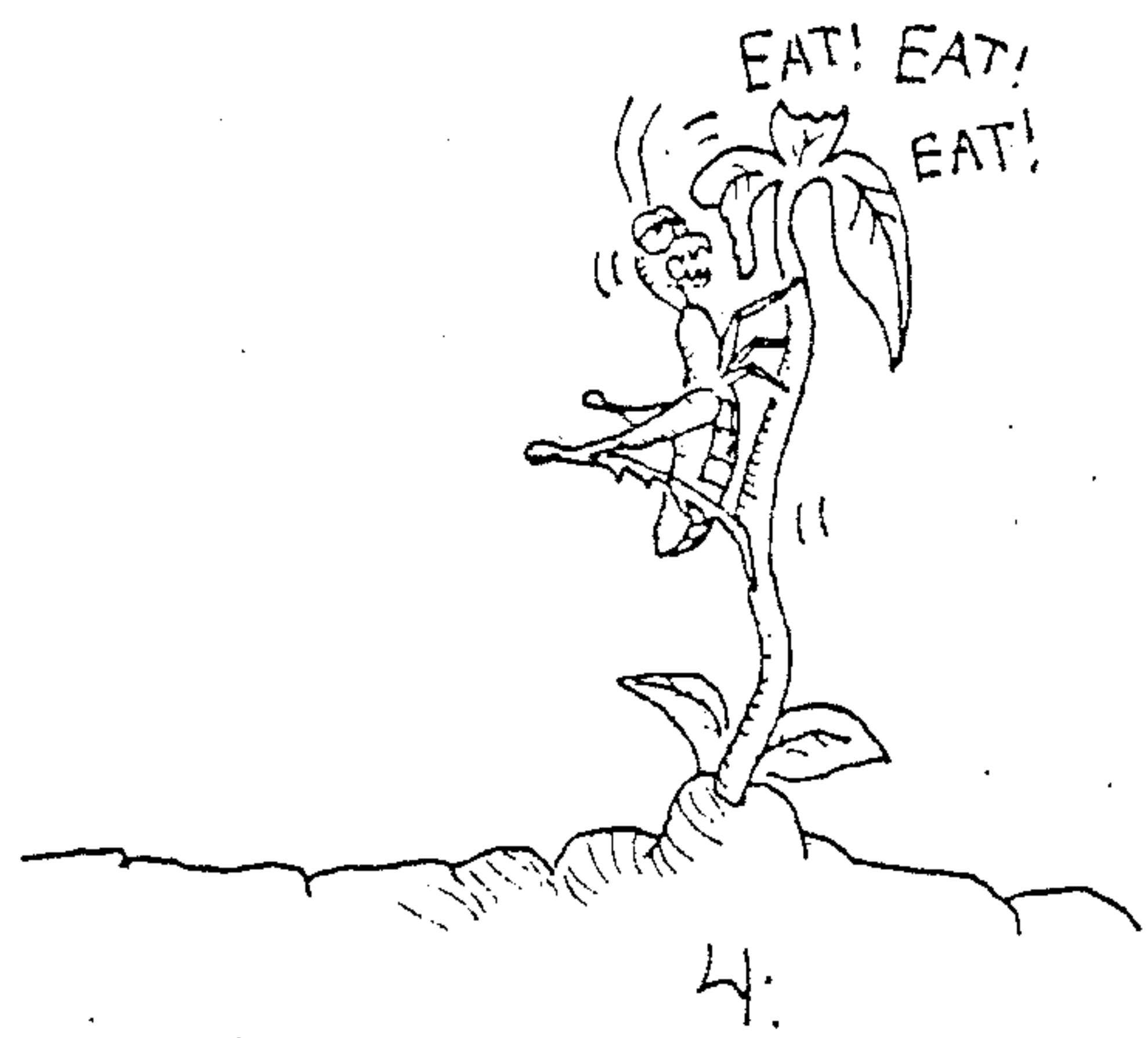
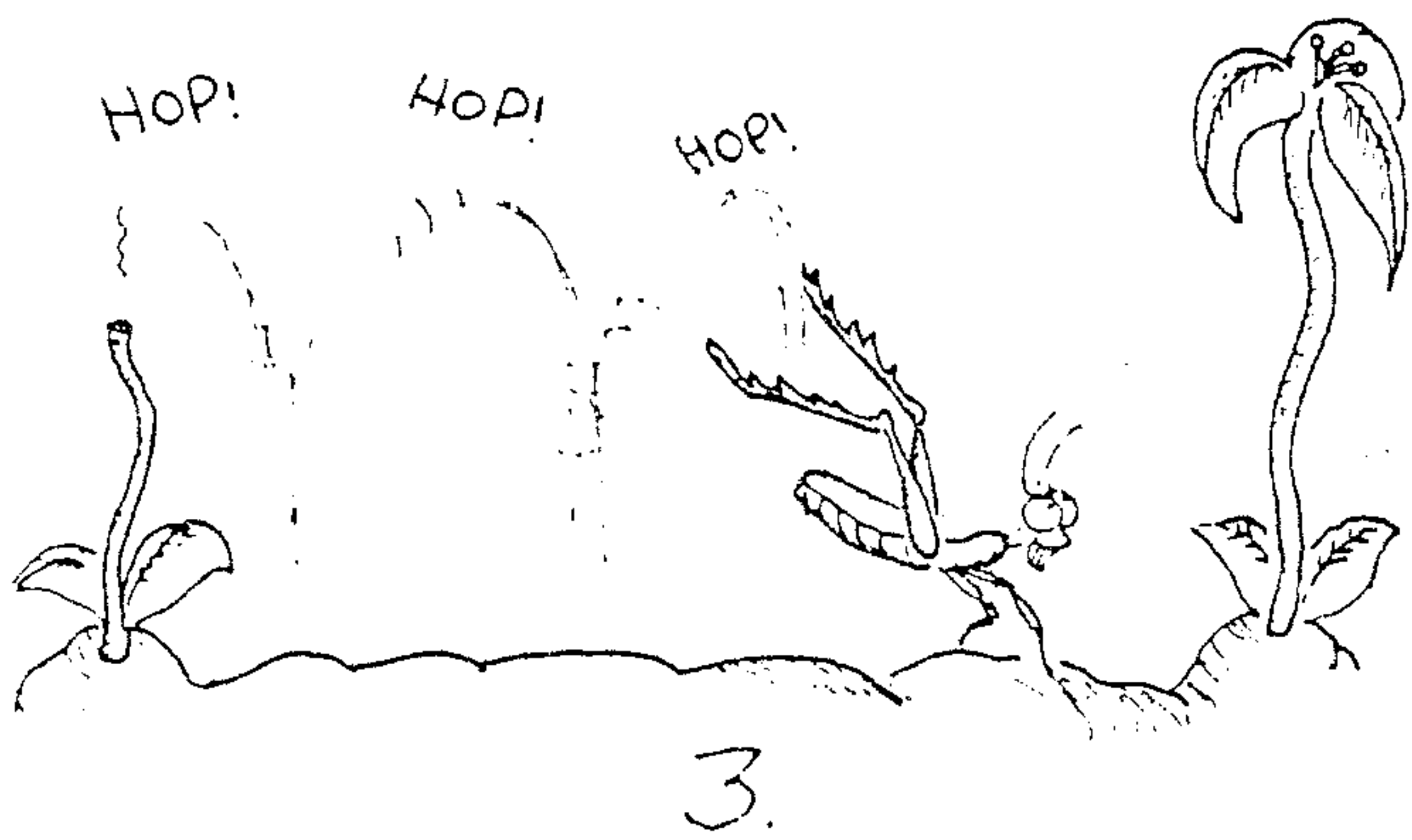
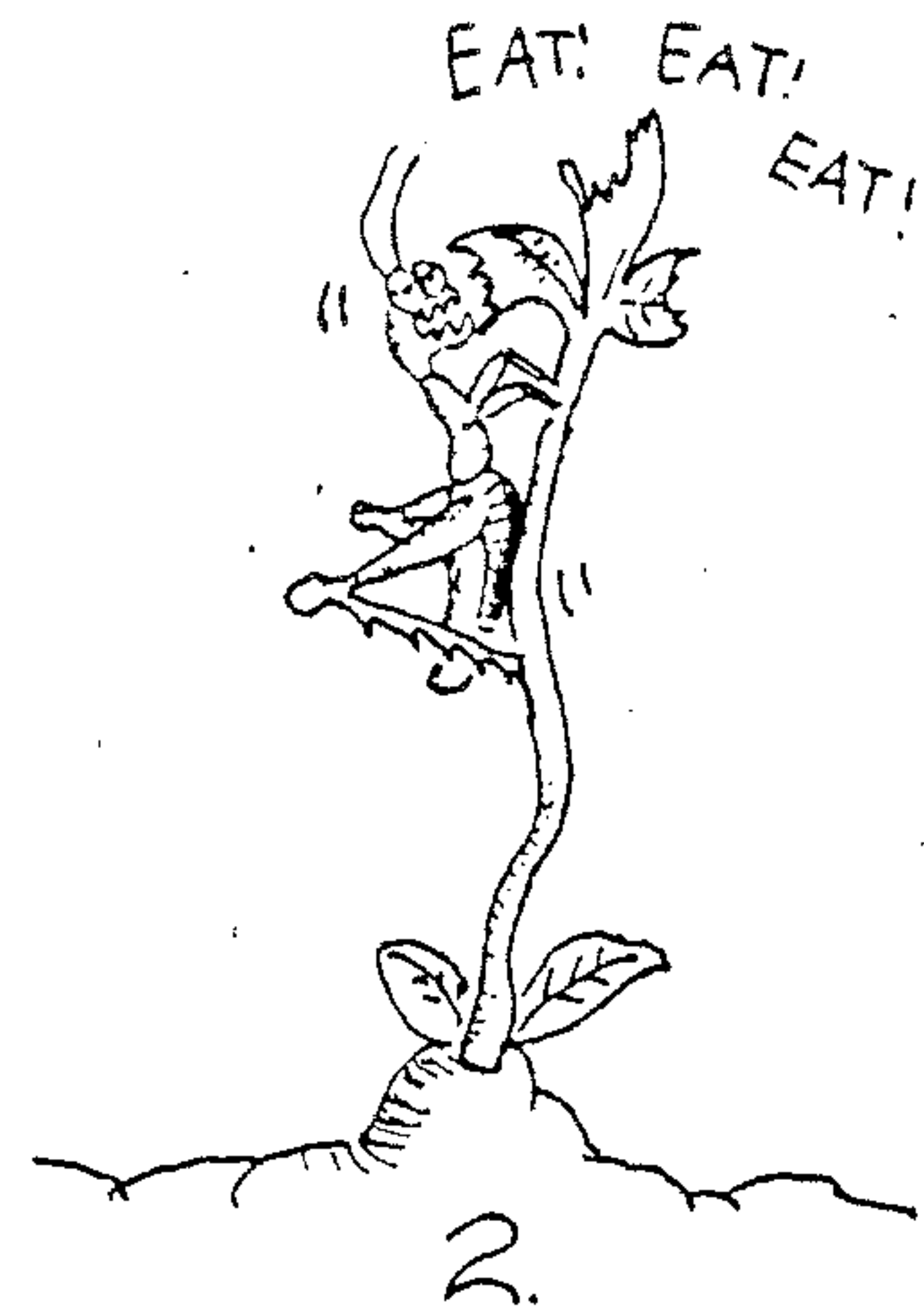
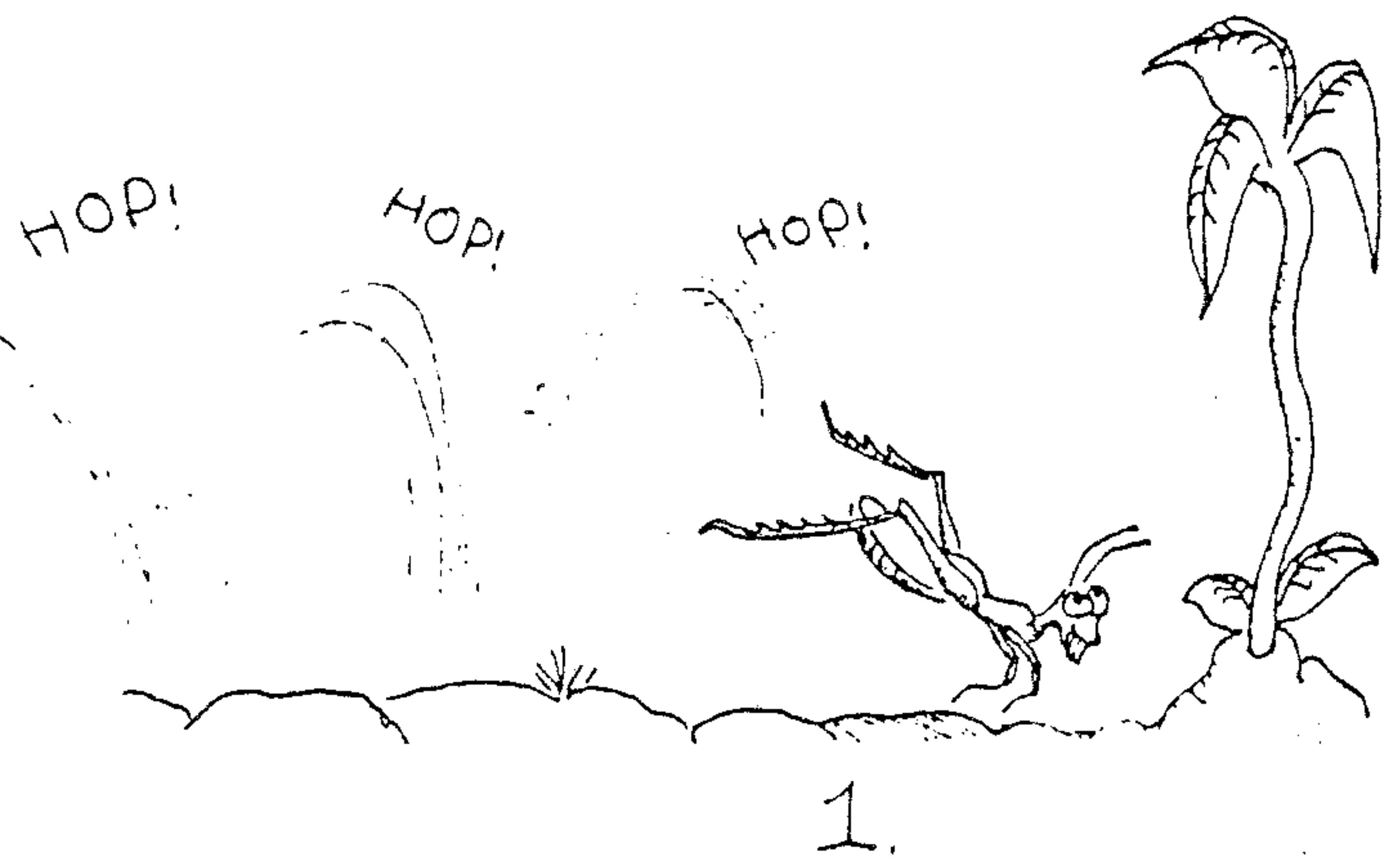
Open glades were first formed with a mat of quaking sphagnum now supporting a heavy growth of cranberries, the orchids, Grass pink and Pogonia; Willowherb; Swamp candles, and Cottongrass. A colony of Buckbean (Menyanthes trifoliata) is the southernmost location known for it. The glades are bordered in many places by lush growths of Cinnamon fern.

Shrub Communities. The earlier, more mature open glades have been taken over by heavy growths of many shrubs, some common, but a few rare ones such as Ilex montana, Taxus canadensis, Amelanchier bartramiana, and Hypericum densiflora.

Growing in this shrubby area are many common herbaceous plants that we find in western North Carolina with one notable exception--the rare swamp Jacob's Ladder (Polemonium VanBruntiae). I had only seen it once before in a remote mountaintop bog in Pennsylvania. By diligent search we found and photographed it in flower at Cranberry!

Bog Forest. On the periphery, and constituting the oldest part of the bog area, the plant life consists mostly of Red Spruce and Hemlock. A number of Rhodendrons along with Yellow Birch and Black Ash are found. The forest floor is covered with moss--sphagnum predominating.

Cranberry Glades is located in the Monongahela National Forest and has been developed and supervised by the Forest Service of the U. S. Department of Agriculture as a park open to the public. It is located on West Virginia State route 39, six miles off U.S. route 219, about 85 miles north of Bluefield, W. Va. We highly recommend a visit in late June or early July allowing for a minimum of a three-day trip.



CONTRIBUTED BY HELEN TURNER--WHO ELSE!

IT'S ENDANGERED IN HENDERSON COUNTY!

What is endangered? The Bunched Arrowhead, that's what.

Your editor has just received an official proclamation from the U.S. Department of the Interior, Fish and Wildlife Service, stating that this semi-aquatic plant, Sagittaria fasciculata was entered on the Federal Register as an endangered species effective August 31, 1979.

And why should we be concerned? Only because there are only two known existing colonies of the plant--a much reduced one in Henderson County, North Carolina, and the other in Greenville County, South Carolina.

The North Carolina Natural Heritage Program and its local resource person will be periodically monitoring the Henderson County colony.

THE WINEBERRY--RUBUS PHOENICOLASIUS

The Wineberry is an alien species escaped from early cultivation trials around 1910 and since then has spread to certain portions of the eastern mountains. Its native home of north Japan is somewhat similar in climate to areas of the Blue Ridge where it is abundant in certain roadsides and semi-clearings.

In early June it blooms, but such is usually overlooked as the white petals are small and inconspicuous. Before blooming the bud presents a prickly appearance with long extensions from the apex of the bud and ovary. These calyx coverings are dull red with an abundance of fine to conspicuous hairs. These five calyx portions slowly open when blooming begins and then after fertilization these same calyx sepals close over the flower and developing fruit.

In the Wineberry, fruit development is always covered by the sepals until the final stages of fruit formation are nearing an end, and then the sepals part and turn outward revealing a slightly orange fruit. This fruit is acid but comes off the receptacle freely and can be picked for eating. If allowed to stay on the receptacle it turns a brilliant scarlet and at full ripening a dull red with a most delightful taste.

It will be noted that not all the fruits ripen at the same time though some canes will produce nearly a half dozen ripe fruits at one time. Such picking is a delight as the pail soon overflows with delicious fruit.

As mentioned, this is our only Rubus in the United States that develops its fruit within a sepal covering. Is this protection an evolved aspect due to the original climate of its native home? Perhaps one could postulate that this species in northern Japan had a very uncertain spring growing season with frosts on many occasions--but one could also point out that the open development of our raspberries are fraught with early frost periods as well.

Another question that arises is the erratic distribution of the wineberry in this area. It seems to be confined to medium elevations in most abundance, though I have found the plant at a few low elevations, but none above 4000 feet. It prefers disturbed soil and moderate sunlight and shade. However, in some localities it grows abundantly in the shade of the Tree of Heaven--but is seldom found in deep shade of other hardwoods. The wineberry is an invader of our native vegetation with good to pleasant results.

If you missed this tasty morsel in 1979, watch for it next June when you may spot its soft red texture while still covered with its coat of sepals. You can hardly miss its scarlet fruit in July. Happypicking for 1980!

Submitted by Miles L. Peele

## WELL, WHAT ABOUT GINSENG?

Depending on your viewpoint, it could be nothing more than a long-standing herbal myth or a definite source of income to many mountain people and some drug processors and distributors.

Ginseng! Come fall there are hundreds of folks out in the hills searching for it. In North America, ginseng has been found from Canada to Georgia, with the lush mountainous coves of western North Carolina being ideal habitats for it. And dried ginseng roots can be worth a hundred dollars a pound, or more!

And why so valuable? Orientals are the world's principal connoisseurs and consumers of ginseng. For more than three thousand years the Chinese have used ginseng as a panacea for its rejuvenating effects and magical healing properties. Indeed, its generic name Panax is from the Greek pas, all; and akos, cure, meaning healing or panacea.

Although ginseng is the most highly regarded medicinal herb in the Far East, the western medical world has only recently given it a glimmer of recognition. Scientists in Europe, and to some extent in the United States, have recently been doing research and experimentation on the effects of the plant. Some of their first tentative conclusions are that ginseng seems to have anti-stress, anti-fatigue, and anti-infective properties. There is also evidence that ginseng is beneficial and stimulating to the endocrine glands which are the principal regulators of the hormone flow. It is probably this property that gives it the highly publicized and exaggerated reputation as an aphrodisiac.

Despite the conservative medical opinion, ginseng's popularity is rapidly spreading throughout America. About all health food stores are selling it. They have every form from imported whole roots to ginseng extract and instant ginseng tea. Strangely, it is rare to find wild American ginseng for sale in these stores. Almost all our best quality of native ginseng is exported to Hong Kong--329,700 pounds in 1976. In turn, the cheaper grades of ginseng cultivated in the Far East are sent to the American merchants.

History reveals that ginseng was used by the North American Indians for the reasons that it appealed to the Oriental people. The Cherokee named it "plant of life."

In 1715 the so-called Canadian Ginseng Rush was precipitated by shipments of quality ginseng harvested in Canada finding a great demand in China. This new source encouraged practically every able-bodied trapper, woodsman, and Indian to scour the forests for the roots. However, by 1850 ginseng was becoming so scarce in Canada that it was no longer profitable to gather it and the market folded.

In the new colonies to the south the ginseng trade was just beginning with most of the supply coming out of the southern Appalachian mountains, especially from Virginia and North Carolina.

This continued demand brought about the successful cultivation of American ginseng in the late 1800's. Many plantations of it flourished until 1904 when most of the plants were wiped out by a leaf blight. It is still cultivated to a limited extent in Canada and our northern states.

Since that time the native ginseng trade with the Orient has steadily increased. It is a dependable business for many but being a seasonal one, the ginseng merchant must deal in other commodities as well. Often it is a small town general store owner who buys ginseng from the collector. He, in turn, will sell to a large herb house like Wilcox Drug Company in Boone, or Lowe Fur and Herb Company in North Wilkesboro, North Carolina.

In 1977 a general ban was invoked on the export sale of ginseng since it was declared an endangered species. But North Carolina was exempt since the state developed a program to ensure that ginseng would not become endangered within its jurisdiction.