## DARLINGTONIA STATE PARK Professor Frank P. Sipe

To most persons, a state park means some area or site, that has been set aside because of its striking scenic interests; or perhaps because it is a shady and protected nook, where the family picnic may be held, and the dinner spread on a convenient table If the vacationist were to head for Darlingtonia State Park, a few miles north of Florence, with visions of a magnificient view, or of eating the picnic dinner, he would be much surprised, for the area is mostly a bog. Why should this acreage of uninteresting looking bog and beach pine be set aside, then, as a State Park? To answer this question, one must have time and patience, to observe carefully the fascinating plants which the area is designed to preserve. -- Darlingtonia, or Pitcher Plants.

The so-called carniverous plants constitute a strange and fascinating group Though, in the animal world, it is a common and familiar thing to find animals capturing and feeding on other animals, we always think of plants as obtaining their food supply by means of the slow process of synthesis, within their own body cells. Cne small group of plants, however, has gone beyond this plant-like method of getting food These are the Carnivorous Plants, which are able, by means of some very amazing devices, to add small animals, such as insects to the daily menu.

A vigorously growing bog of Pitcher Plants is always a showy sight---the tall, stately pitchers, each with an arched, hood-like top, mouth-like opening, and a showy, forked, tongue-like appendage at the mouth opening, the whole usually greenish but splotched with shades of red or orange These pitchers often stand so close together as to look like a closely-packed crowd of strange creatures; many persons have called them Cobra Plants, seeing in the erect leaf, a fancied resemblance to that poisonous serpent.

A little patient examination of one of these pitcher leaves will show its peculiar and striking character. The whole loaf, as can readily be seen, is tubular. The lower part of this tube contains water In order to see this, one must keep the leaf upright, and cut away segments from the top, until this basal pool can be seen. Here one will find a miscellaneous collection of insects in various stages of decay, their bodies being acted on by bacteria. This decayed animal material can be absorbed by the walls of the pitcher leaf and thus the plant profits from its devious devices for trapping its prey

One can examine a leaf, and note how nature has equipped it for its strange work. From the outside one will see a dome shaped top, beset with numerous translucent "windows". An ample "mouth" on the under part of the dome. furnishes an easy entranceway A colorful leaf like or "petal-like" forked appendage grows out from the edge of this mouth. Examining the edges of these "petals". and also the inner, rounded border of the mouth, one will find a sweetish fluid, secreted by the plant This is the plant's lure or bait. By touching ones finger to these areas, and then to ones tongue, it is easy to prove that this is true. Thus the unsuspecting insect is led to the trap following the line of sweets up into the dome-shaped top.

Once inside this dome, suppose the insect decides to fly to another location. Above him, numerous translucent windows appear like exits, to an insect's inaccurate vision; the mouth through which he entered, since it opens downward towards the shadowy ground will be dark and unnoticed. His wanderings will eventually lead him into the upper tubular part of the leaf, where a few promising windows still can be seen. The walls of this upper part of the tube are of a glassy smoothness. Keeping a foothold on this steep glossy surface becomes increasingly difficult, and the insect soon slips lower and lower into the depths. At this point, he may realize his mistake, and try to climb back into the welllighted dome But the lower parts of the tube are provided with another hazard, hundreds of stiff sharp, <u>downward-pointing</u> hairs. Each hair stands like a pointed

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dagger, checking all efforts at climbing upward but offering no obstacle to going downward. And the dark pool below finally receives the luckless straggler. And in this way the Pitcher Plant has added one more tiny morsel to its animal food supply.

If one should visit the Pitcher Plant bog in early June, the large showy flowers may be seen; a single nodding flower on a tall, foot-high stem, with dark red or purple petals. The central pistil develops later into a conspicuous, erect seed pod, and these can be seen all during the summer.

The Carniverous Plants have various devices for catching their prey. One of these is the P<sup>4</sup>tcher leaf. Other "Pitcher" plants grow in various parts of the world. None of them is of very wide distribution. One grows on our own east coast; another in northern South America; another in Ceylon and Madagascar. Our Pitcher plant, Darlingtonia, extends through northern California and southwest Oregon. The Darlingtonia State Park, just north of Florence probably is very near the northernmost limit of this plant.

Another Carniverous plant, the little Sundew commonly grows in the same locations as Darlingtonia. In some ways, it is even more animal-like than our Pitcher plant tho not as showy and spectacular in appearance. Getting acquainted with this odd plant should furnish the observing vacationist with another hour of entertainment.

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