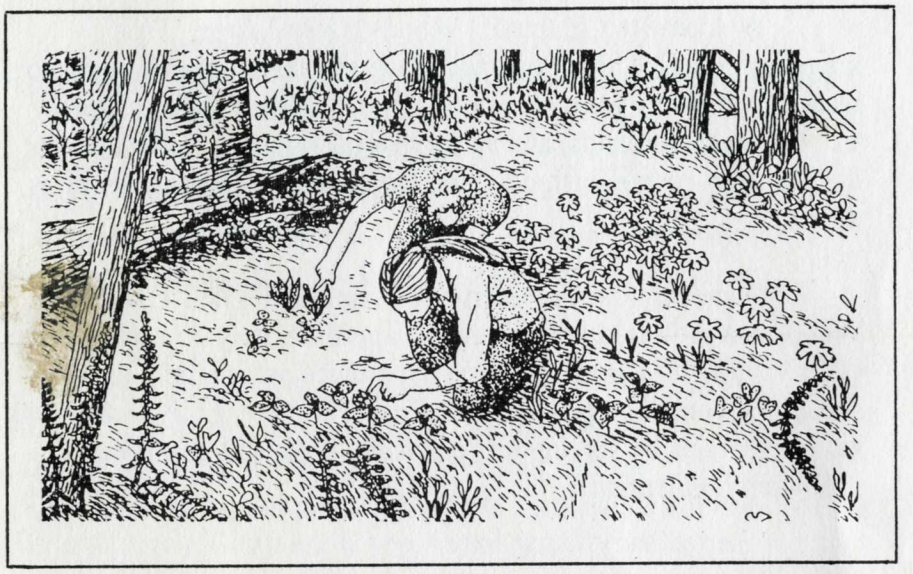
THE CHANGING LANDSCAPES OF CENTENNIAL WOODS NATURAL AREA

A FIELD GUIDE



UNIVERSITY OF VERMONT
NATURAL AREAS

#1 FIELD SUCCESSION

Because this field is no longer kept open by humans for pasture or other farm use, it is undergoing succession, or orderly change in the types of plant and animal communities that live here. This field of grasses, goldenrods, milkweed, and other herbaceous or non-woody plants is changing as the young white pine trees and other woody species invade it. Notice how much smaller the pines and hardwood trees are at the edge of the field compared to those even 50 feet into the woods. How long do you think it will be before the forest completely overtakes the field?

A very common area of increased plant diversity and animal activity is at the edge where two types of natural communities meet. The increased availability of food and shelter opportunities offered by these two communities allows this area to contain a greater diversity of animals. How many different kinds of insects can you find or hear in the grass? Do you know what kinds of animals depend on these insects for their nourishment? Look for traces of mice, rabbits, woodchucks, or birds that live in this field.

The next stop is through the woods at the bottom of the hill.

#2 THE MARSH

Notice how moist it is underfoot. Where do you think the water comes from that keeps this area constantly wet? Consider how close you are to a very developed part of Burlington.

Water saturated soils do not have much room for air. Because roots need air to live, a variety of species have developed ways to get air to their roots. Hollow stems or shallow roots are just a couple of ways for plants to provide their roots with air.

Look for a dark green plant shaped like a soda straw growing here along the trail. The horsetail or scouring rush is a primitive plant with its spores in a cone atop the stalk. This plant incorporates silica, a crystalline compound that occurs abundantly in sand, into its tissue. Historically, Europeans used the scouring rush to polish pewter and to sand wood. Early settlers found its abrasive qualities to be useful in scouring their pots and pans.

On the opposite side of the stream is a cattail marsh. What dispersal mechanism do cattails have to assure that their seeds travel great distances to carry on new life? Their seeds are so light that they are able to be borne by the wind for miles. Imagine where the seeds that started this bed came from. Notice other plants and consider their means for seed dispersal.

The next stop is where the trail comes close to the stream edge before the bridge.

#3 THE STREAM

Close your eyes and listen to the stream. Does it sound different here than it did when you came out of the woods? Where is the water going?

Notice the action of the water and see how the banks of the stream are being eroded from some places and being deposited in others. From where did the sand carried in the stream come? Imagine how much water was in this stream when it carried some of the large stones deposited in the pile in the streambed. Does there appear to be a pattern in the way different sized materials are deposited in the stream bed?