# Design a Raft

## To run the rapids in Forest Park

Have your students use their **"Floating and Sinking"** knowledge in a real life situation. As part of the fifth grade *Changes in Nature* program at ECOS, students are asked to design a raft that can stay afloat when placed into a fast-moving stream. This activity lets students apply what they learn in the classroom to solve a problem at ECOS.

To reinforce the concept of reusing/recycling, the rafts should be made of reused materials, such as cans, plastic bottles, or anything else that might be ready to discard. Use only materials that will not fall apart in water. Please keep safety in mind. Remind students not to use glass bottles or cans with sharp edges.

Rafts can be made in school or at home prior to visiting ECOS. The finished raft should be brought to ECOS on the first day. Students can work on their designs independently, in groups, or as a class project. The option is up to you. Because the stream is fast moving, sails or other means of locomotion are not needed. Depending on what direction the wind is coming from, a sail may actually cause the boat to go in the wrong direction. This could raise some good classroom discussions. What could happen to the rafts on windy days? How will the stream be affected by heavy rain or a lack of rain? How does weight and momentum affect the speed of the boat?

This activity is optional. If you choose not to have students make rafts, we can still do the stream activity. For more information or help with the design call ECOS at 787-6493.