Design a Shelter
to keep warm in winter

As part of the Winter Survival program at ECOS, students learn how to construct a shelter to keep warm in winter. They are supplied with ropes and tarps which they learn to combine with materials found in the forest to design and construct their shelters. We would like to offer an exciting way to prepare students for their two day adventure.

Students will be asked to design and draw a shelter before coming to ECOS. Their challenge is to keep warm if they were lost or stranded in the winter. The only materials available to them is some rope, a tarp, and things found in the forest. These designs will be used as part of the shelter building activity on the first day of their ECOS visit. Students can work on their designs independently, in groups, or as a homework assignment. The option is up to the classroom teacher.

This activity is a good way to reinforce the learning standards of Heat Transfer in the Earth's System/Heat Energy/ Forms of Energy as well as, the learning standards of Construction Technologies. Before they start their designs, ask students to think about:

- the direction of the sun – radiation.
- the direction of the wind – convection.
- where to build a fire after completion of shelter – radiation.
- materials used to build shelter (ropes, tarps, and things found in the forest).
- the size of the shelter – how many people will be using it.
- using a hill or valley for protection.
- insulation between bodies and cold ground – conduction.

This activity is optional. If you choose not to have students design a shelter, the shelter building activity on the first day can still be done as always. For more information or help with the design call ECOS at extension 6493.

"A comfortable house was once made here," said Thoreau, "almost entirely of such materials as Nature furnished.