

## Menmuir Hall

Menmuir Hall Committee have devised and installed a system which has three parts:

### A) Micro Hydro-Electric Generator



A small dam in the burn feeds water into a long run of pipe. This pipe narrows at its end, ejecting the water at high speed. This high speed jet drives a small generator, which produces electricity.

B) A ground source heat pump uses this electricity to pump water/anti-freeze through a 'slinky'-coil buried approx 1 metre under the ground. The water/anti-freeze absorbs the warmth in the ground, and returns it to the pump where the heat is removed and transferred to under floor heating pipes.



C) Under floor heating pipes release heat upwards into the hall. These pipes are insulated underneath.

This provides a constant background heat, making the use of the main heating system less costly.