



Activity 7. Recharge research

Aim

This activity demonstrates the effects that different soil types have on the rate of recharge occurring in the upper parts of catchments. The greater the recharge, the greater the build up in the ground water.

Materials required

- Small amounts of three different soils
- Three old plastic soft drink bottles (1.25L size)
- Three old jam lids, evaporation dishes or similar
- Water

Procedure

1. Cut the neck and “shoulders” off the tops of the three bottles – this is the part of the bottle to be used in this experiment.
2. Leave the bottle tops on for the moment. Fill each bottle with a different soil type.
3. Carefully remove the top of each bottle and invert it so that each bottle is standing “upside down” in a jam lid.
4. Carefully pour the same amount of water into each bottle and observe the rate of flow of the water through each of the different soil types.

Following up

1. Through which soil did the water pass most readily (quickest)?
2. Through which soil was the rate of movement the slowest?
3. How might these rates have been altered if a plant had been growing in the soil in each bottle?
4. What would this have meant in a natural landscape.