

## **Activity Sheet No. 18**

### **Aquaculture and Hydroponics**

Farmers are now turning to aquaculture to bring in extra income when their crops are out of season. To aid in their water filtration, many farmers will use hydroponics as a type of biofilter (the use of a live organism for filtration). This activity can illustrate how beneficial this process is to both organisms.

The mechanics of this style of gardening are simple, and may be purchased in kits. No soil is involved: an electric pump is used to flood a 4"-deep tray with water from a fresh water aquarium six times a day. Just add some fish, plants and water, and adjust the pH. All the nutrients your plants require come from the aquarium water. To start seeds for growing hydroponically, use distilled water and some of the aquarium water. Pour the mixture over a special rock-wool mat placed in a nursery flat. After the rock-wool mat has absorbed the water (it takes about an hour), drain off any excess, and plant your seeds. The rock wool has perforations that make planting easy. Place two seeds in each hole to ensure viability. Check the seeds in 5 to 7 days. If roots are protruding from the bottom of the rock wool, the seeds are off to a good start.

For photographs and more information, please check out this website:

[http://www.diynet.com/diy/pf\\_other/article/0,2029,DIY\\_14170\\_2269795,00.html](http://www.diynet.com/diy/pf_other/article/0,2029,DIY_14170_2269795,00.html)