### SMALL ORCHARDS

# Maintaining a Healthy Orchard

Encourage the tree to grow as well as possible. A healthy tree will grow vigorously and produce a framework of fruiting branches or spurs

A healthy tree withstands outbreaks of pests and diseases better

### Watering

In the first 2 years it is essential to water during hot, dry spells. Equivalent of 2 watering cans of water per tree every 2 weeks. Avoid watering with small quantities of water as this will encourage apple tree roots to grow towards the surface of the soil.

• Keep base of tree free of weeds for first 4 years to prevent competition for water and nutrients. After that you can let vegetation grow around the tree

hand weeding

textile mulch maintains moisture in the soil and prevents weeds growing. Replace it if the material gets torn and peg down. Similar materials are available from garden centres

### Feeding

Foliar feeding of seaweed and iron especialy if the leaves are pale. It is useful on thin chalky soils. The leaves are sprayed monthly with a solution of Maxicrop seaweed and iron available from garden centres.

### Compost

Spread compost around the base of the tree

### **Pruning**

Remove dead, diseased and dying branches.

Prune out any branches which are crossing and rubbing against each other as these will cause damage and be a site for infection from fungal diseases.

Suckers from below graft union

All fruit trees are grafted. Suckers from below the graft union are from the rootstock and should be removed as they will compete with the grafted variety.

For more experience come on an apple tree pruning course run by Bryn Thomas. See Brighton Permaculture website for further information.

**Tools** 

Felco No 2 Secateurs, Silky pruning saw

## **Identifying and Managing Common Pests and Diseases**

- Encourage the tree to grow as well as possible.
- · A healthy tree withstands outbreaks of pests and diseases better.
- · Encourage different habitats near the orchard

wildflower areas.

hedgerows.

- This will increase the population of the predators of aphids and winter moths.
- Hygiene

Prune out and remove all diseased branches. Remove rotting fruit from under tree.

Observation

#### Canker

- · Fungal infection causing girdling and dieback of twigs.
- Prune out infected shoots and burn material

# **Powdery Mildew**

- White powdery fungal disease which covers the young growth.
- · Prune out infected shoots in summer and winter.

## Scab

- Dark, corky marks on fruit
- · Greenish-brown blotches on leaves

The fruit remains edible.

Some varieties will be more susceptible to scab than others.

### **Brown Rot**

- Soft brown rotting of entire fruit
- Fungal infection entering wound caused by birds, wasps or caterpillars.
- · Infected fruit hang on branch throughout winter.
- Remove infected fruit

## **Rosy Leaf Curling Aphid**

Cause tight rolling of leaves and severe deformity of shoots.

- Summer populations protected by tightly curled leaves.
- Habitat containers for earwigs and ladybird larva.
- · Spot spraying with palm oil

## **Codling Moth**

- Codling moth caterpillars tunnel into the centre of the apple.
- · In mid august they finish feeding and spin cocoons under loose bark or tree ties.
- On a small scale there is no effective control.

### **Winter Moth**

- · Leaves and shoots eaten during spring by winter moth caterpillars.
- · Wingless female moths emerge from pupae in soil and crawl up trunk to lay eggs.
- · If there is a lot of damage: Pick off caterpillars by hand

## Reference

Pruning and Training. Christopher Brickell and David Joyce. RHS

The Fruit Garden Displayed. Harry Baker. RHS