CASE STUDY: KIWI DOWN UNDER

Kiwi Down Under is a commercial organic fruit farm of 16 hectares just 15 km south of Coffs Harbour. The plantation includes a wide variety of tropical fruits and nut trees, including kiwi fruit, mango and macadamia. Kiwi fruit are the main crop; varieties Haywood and Dexter.

Marguerite and Tom Hackett are biodynamic farmers certified with ACO, Australian Certified Organic. In addition, the shop was certified with Organic Retailers & Growers Association of Australia (ORGAA) (whose operations merged with NASAA in 2002).

Marguerite and Tom Hackett have successfully produced, marketed and exported certified organic produce since 1991.

Figure 14a: The property before it became an organic farm

Figure 14b: The property now, organic kiwi fruit plantation

Figure 20: Kiwi fruit on the vine

Forest trees on all four sides of the kiwi fruit plantation were planted as windbreaks.

Mulch and compost are spread over the orchards:
- ground cover is slashed. Tom's attitude to weeds is that they are just *mulch in the making*. Moreover, the more deep rooted a 'weed' the better, because it contributes to improved soil structure, opening up the soil at depth and helping moisture penetration.
- compost is made from pasture.

Biodynamic preparations are spread throughout the farm.
The organics students from the local TAFE college have the opportunity to gain practical experience making compost on this farm. Materials for the compost include suitable refuse from the Top Shed Tea House, sheep manure, wool clippings, poultry shed clean-up, pasture mulch (which has been pre-cut with a forage harvester), wood ash from burnt prunings and lime. Rock potash and rock phosphate are added as required.

Figure 22: Inset, carambola fruit

A section of land is devoted to a mixture of pecan nuts, lychees, custard apples, carambola, avocado, banana and tamarillo. This section has few inputs: compost, pasture mulch and biodynamic preparations.

A 2 hectare block is devoted to a macadamia nut plantation. This plantation is self-mulching from
- dropped leaves
- grazed pasture growing between the trees

Sheep graze the pasture; 17 to 20 head are used as a rotation: through the orchard areas and kiwi plantation in winter and through the macadamia and mango plantations in summer. The sheep do the mowing and spread fertiliser. It is interesting to find that foot rot and fly strike are not problems, although this is a sub-tropical climate. Sheep are occasionally used for meat and the wool is sold for spinning.

However, Kiwi Down Under is an organic farm and more. It includes the Top Shed Tea House that, by arrangement for group bookings, serves fresh and natural foods with absolutely no harsh additives, chemicals or preservatives. Marguerite opens the Top Shed each Thursday to sell a range of local and interstate organic produce: fruit, meat, dairy products, vegetables,
sauces, condiments, flour, rice and breads. In addition there are many other gift ideas: jams, crafts, dried fruits, herbal body products, home spun wool and books about the organic and biodynamic industry.

Marguerite and Tom must be a wonderful advertisement for the biodynamic way of life because in addition to all the above they also run guided tours for group bookings and specialty tour groups; all tours are by arrangement.

**Observations**

Over the years of this production Tom has made valuable observations. Some of these apply as much to conventional farming as they do to organic and biodynamic farming. But where there are problems, the solutions for organics and biodynamics may involve more thought, effort, time and care.

**Diversity of crops** is important for the biological health of the farm. However, it is important to have a manageable area and economically viable yield for each crop.

**Soil.** Soil structure and fertility improve with the applications of mulch, compost and biodynamic preparations. Earthworms are now plentiful in the soil in the kiwi plantation. Kiwi fruit vines are normally surface rooting but Tom's vines now have deep roots and the plants have become stronger; there is less need to irrigate the vines and they are less affected by drought.

**Diversity of marketing.** It is essential to involve different marketing techniques: value-add to produce; sell at local markets; sell interstate; sell to other retailers. Be aware that processors want large quantities of produce and all markets expect a consistent and reliable source of product.

**Time and effort.** As a farm becomes more and more productive there are many things that need to be done at the same time. Efficient production involves planning so that there will be enough time (and energy) at critical times.

**Production size.** Each part of the enterprise should be large enough to support machinery purchase when necessary. For example for a large harvest, harvesting machinery may be more practical than hand harvesting but the crop must generate enough return to pay for the machinery. Decide the stage at which you will need improved equipment; a brush cutter is not as efficient as a mower, but the latter is more expensive and may be too costly for the area involved.

Compost production should be large enough for the entire farm; consider the area of pasture available and the cost of inputs. Plan how to spread the compost.

**Eventual plantation size.** Be careful not to plant trees too close together; imagine how big they will become.

**Problems.** The organic grower is forever facing problems, and they change. For example, sulfur crested white cockatoos have recently become a pest for the pecan nuts; they can destroy an entire crop. The reason for this could be the recent plantings of pecan nut plantations in nearby hobby farm blocks.

Nut borer in the macadamia plantation has emerged as a recent pest.

Windbreaks can include trees that later become a nuisance. For example they may grow too big to manage, drop limbs, worry neighbours, block light or spread too rapidly beyond the windbreak section.