2003 NZDFA Environmental Awards

Recognising excellence and innovation on sustainable, environmentally responsible deer farms.

Adele & Errol Croad.

One of the major benefits of environmental awards of this standing is in education within the wider community through associated field days, news media coverage and greater awareness of excellence.

In my own case, developing a new farm with new challenges and an exciting new venture allowed a re-look at the potential for better land management that suited deer farming and deer behaviour.

Areas were planted for shade and shelter along with small forestry plantings in erosion-prone areas. Fencing bush gullies to protect native fauna and flora also filters out nutrient runoff and maintains water quality – so important in the public eye today. The fenced-off shade and shelter areas, while great for environmental protection, can become a haven for undesirable pests like rodents, rabbits, ferrets and possums. Pest control is needed, not only for your trees to survive and the bird life to flourish, but also to reduce the risk of Tb entering your property. As shade and shelter trees mature, the benefits are all encompassing – shelter from the elements, stock health and well being, improved habitat and thriving native bird life.

As farmers we are guardians of the land for the next generation, with the view of preserving and enhancing the value of the farm asset. The New Zealand Deer Farmers' Landcare Manual, with its problem-solving solutions in user friendly format, will assist with these sustainability objectives when published next year. These environmental awards recognise good farming practice in the same way that Quality Assurance and accredited farms do. Enjoyment of everyday work is enhanced in this environment. The excellence shown by this year's NZDFA award winners exhibits practical innovation and ideas that all deer farmers are encouraged to consider in enjoying the rewards of their own farming operations.

Errol Croad, Chairman, NZDFA Executive Committee

Operating in an environmentally-friendly, sustainable manner is not always the easiest of roads...

...but it is the most rewarding.

CONGRATULATIONS TO THE WINNERS AND ALL OF YOU WHO PARTICIPATED IN THESE AWARDS.

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Summit-Quinphos congratulates the winners of this year's Deer Farmers' Environmental Awards.

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Enhancing biodiversity complements commercial success

Wayne and Tricia Aspin

Winners of the Premier Sir Peter and Fiona Lady Elworthy Environmental Award, and the ANZ Bank Merit Award for environmental enhancement.

Wayne and Tricia Aspin farm 74 ha of light clay sandy loams on the Awhitu Peninsula bordering the Manukau Harbour, Auckland. Stock carried includes 150 mixed age hinds, 153 fawns, 70 rising 2yr hinds, 30 rising 2yr stags and 101 cattle.

The Aspins converted from dairying to deer in 1989. The negative impact of unrestricted deer farming on the light sandy clay loams was, however, soon apparent. Wayne and Tricia have been working proactively to protect not only their farm environment, but also that of the surrounding district.

In little more than 10 years the Aspins have made a significantly positive environmental impact while developing a commercially successful farm business, utilising some of these key steps:

Strategic fencing

- Major relocation of fences to retire gully areas and protect watercourses.
- Manuka stands on gully sides and around riparian zones protected using two-wire electric fencing.

Retiring land and replanting

- Retired gullies planted in 43 native species as well as woodlots including cypress (Leyland cypress *(Cupressocyparis leylandii), Cupressus torulosa, C. lusitanica and C. lusitanica* "blue hays"), Tasmanian blackwood, pinus radiata and kauri.

Shade and shelter plantings

- Plantings with pohutukawa, coastal banksias, and karo hedging and well protected individual shade plantings of Norfolk pine, redwoods, honey locusts, macadamias, black walnut and poplar.

Soils, water and fertility management

- Prompt attention to areas of bare soil/eroded sites caused by fence pacing or "playing". Wet holes dug out and drained using Novaflo, backfilled with scoria, covered with earth and reseeded.
- Bare areas along fencelines treated with the chisel-plough, mulched with old hay and reseeded.
- Reticulated water to all paddocks.
- Troughs protected with timber framing covers to minimise deer splashing water and the surrounds lined with rock.
- Biennial soil testing; Summit-Quinphos Super King RPR applied by truck.

Animal welfare

- Every fawn treated for ticks with Bayticol at birth.
- Weaning delayed until early spring. Later weaning minimises soil damage. The Aspins believe this also improves fawning percentage.

Pest plants

- Ragwort and thistles treated with granules weed stick as required.

The judges on this award-winning property noted that the Aspins are strongly managing the three aspects of sustainable land-use: economic, social and environmental – the triple bottom line philosophy.

Wayne and Tricia are very aware of their local context, and are keen to deliver clean water from their farm to the adjoining estuarine swamp and the Manukau Harbour.

They are strongly involved in the community through the local Landcare group, the local historical society, the New Zealand native orchid group and their nationally recognised involvement with orienteering.

Graham Carr – Peel Forest Estate

Velpool Environment Merit Award for excellence in environmental management for animal welfare.

When Englishman Graham Carr purchased the historic Peel Forest Estate near Geraldine in 1987 he brought with him a love of English trees and a vision of building upon the Estate's already impressive treescape.

To date his vision is being realised with hundreds of English broad-leafed trees planted and protected by innovative **tree protectors.** Favourite species include the impressively growing oaks. Graham believes the **shelter and shade** from the hot dry northwesterly conditions minimises fence pacing and reduces soil erosion and compaction.

Graham has identified and fenced out several wet swampy areas on the farm. These **fenced wetlands** have been planted in a mixture of deciduous and evergreen species. Ponds have been constructed and these areas now have high amenity and increased biodiversity values.

One reach of creek has been double-fenced and planted and an alternative reticulated water supply provided. This riparian work had been designed to allow maintenance by machine.

Other positive environmental practices include:

- placement of rock in wallows and around water troughs
- direct drilling
- good sump to contain deer shed washings
- regular soil testing and appropriate fertiliser policy
- bale wrap to landfill
- contribution to Rangitata Landcare Group
- new shelterbelts planted annually.

The judges noted that the newer plantings complement the significant historical plantings and the property has high amenity values. Swampy areas have been retired and well planned soil and nutrient regimes are operating.

John and Jill Needham

Summit-Quinphos Environment Merit Award for an innovative, holistic approach to sustainable land management.

John and Jill Needham farm 40 ha of predominantly Tarawera Ash soils 18 km south of Whakatane. There are two spring-fed lakes. The 120 hinds wintered are farmed organically, with homeopathic remedies used.

When the Needhams started farming deer in 1983, the lakes and the **steeper faces were fenced** and planted. There are four eucalyptus woodlots, providing shade and privacy during fawning, and a commercial return. **Shade species** include ash, oak, paulownia, plane, willow and idesia.

The lake surrounds are planted with a mixture of natives and ornamentals promoting biodiversity and amenity values. **Wallows have been fenced** out and fence alignment improved to minimise pacing. Heavy duty recycled **fishing net is pegged over bare ground** to facilitate revegetation of bare and eroded sites.

The **fertiliser** regime is based on Summit-Quinphos Clover King RPR. Organic 100 is used as an extra dressing on the silage paddocks between cuts. Cobalt and selenium are applied and a fish brew to stimulate microbial activity spread around the farm. There has been a huge increase in earthworms and there is an excellent moist humus layer.

Flats are **undersown** with a herbal ley, including plantain, for better quality feed. Rabbits, possums, stoats and magpies are targeted by shooting, poisoning and trapping. **Goats** help control nodding thistle, ragwort and barberry. **Bio-control** agents, the nodding thistle weevil and the ragwort flea beetle, are giving very good results.

Murray Hazlett

Duncan and Co Environment Merit Award for excellence and innovation in planning a sustainable deer farm.

Murray, a sprightly 78 year old ex deerstalker with a passion for deer, farms 48 ha of flat heavy soils on the outskirts of Invercargill with his son Graham. They farm 450 hybrid deer: 230 hinds, 200 weaners, and 29 stags.

The judges were impressed with the layout of the farm, attention to detail and many innovations, including gate latches and stops, shed design and a craftily painted deer figure on a shed wall to encourage deer to move down a lane. Other noteworthy features included:

Extensive, well managed **shelterbelts** protect stock and pasture from the cold, salt-laden south-westerlies. Leyland cypress, radiata pine and the salt-tolerant eucalypt *E. cordata* are favoured. East-west shelterbelts feature hybrid willows – using deciduous trees on this orientation minimises winter shading. Internal shelterbelts are protected by electric fencing. The bottom wires are turned off during calving to allow fawns cover in the rank grass and under trees. Shelterbelts help minimise fence pacing – any that occurs is chain harrowed. Bare areas are oversown and topdressed.

A small watercourse is **double fenced** with electric fencing and there is a good riparian filter zone of rank grass. Stags are kept in a tree-lined block. **Rubbing posts** are provided, with well gravelled surrounds. A converted woolshed for **sheltering** lighter weaners has an innovative hay feeding system. Litter from the floor is recycled. Maintaining **drainage** in the heavy soils is the key to avoiding damage.

Paul and Pam McDowell

Fish and Game Environment Merit Award for excellence in riparian management.

Paul and Pam McDowell farm 300 velveting stags on 40 ha of mainly flat land near Rotorua. The soils are friable pumice, ash clay and an area of peat.

The Waikaukau Stream flows through the property. The McDowells' riparian management of this stream, and the associated drains flowing into it, was the outstanding environmental feature.

The Waikaukau stream flows out of the regionally significant Kapenga wetland. It has significant freshwater fisheries values and is **double fenced** throughout the McDowell property. Much of the substantial buffer zone is planted with a mixture of natives and exotics, providing valuable **shade and filtering** for the in-stream habitat.

A recently purchased block borders the Waikaukau stream. Paul has erected the riparian fence with a wide **buffer zone** with potential for further plantings. Blackberry along the bank is well controlled with *Escort.* As an innovative touch the drains on the peat block are fenced with **3-wire electric,** allowing maintenance cleaning over the fence.

Well designed **stock crossings** over drains and the stream provide good fish passage. Water from roadside water tables and neighbouring properties flows through the McDowells' property and into Waikaukau stream via flood channels. Paul has fenced off a section of channel and excavated a **sediment trap.** He intends to **plant wetland vegetation** within the channel to trap contaminants and sediments before water enters the stream.

Environmental protection: practical winners' tips

- Promptly treat bare areas along fencelines, e.g. chisel ploughing, harrowing, mulching and re-seeding help restore these areas.
- Heavy duty recycled fishing nets temporarily pegged over bare areas keeps deer off and helps with revegetation.
- Woodlot plantings have multiple benefits: environmental, animal welfare and commercial.
- Place rocks on soils around water troughs and timber framing over troughs to prevent damage from "water play".
- Hard-wearing grass species can help preserve benefits of revegetation along fencelines and other bare areas.
- Cutouts on steep fencelines divert water flow and minimise soil loss.
- Deciduous trees on some shelter belts minimise unwanted winter shading.
- Rubbing posts and other diversions can help prevent fence pacing and other damage from restless animals.
- Sediment traps with suitable wetland planting help filter out sediments and contaminants and deliver clean water downstream from your property.
- Regional councils can advise you on environmental protection work, and any assistance you may be eligible for.

Further information

©New Zealand Deer Farmers' Association, PO Box 10-702, Wellington, October 2003. The Deer Farmers' Environmental Awards are part of the deer industry's Sustainable Farming Fund project, The Deer Farmers' Landcare Manual. The completed manual will be available in 2004 and will feature many of the examples developed by the environmental leaders featured in these annual awards. For further information on the Awards, or the Landcare Manual, contact the project convenor, John Paterson, ph 07 332 2093, email john-p@wave.co.nz

Cover photo: "Stags against Southern Sky" by Dave & Christine Mackie, 2003 Warnham & Woburn Society Photo Awards.

Other photos by Mark Sutton, Fish and Game, and Simon Stokes, Hawke's Bay Regional Council.