# **NATURE: THE ULTIMATE WILDLIFE SHELTER**

#### **INTRODUCTION:**

I would like to thank the organizers of this conference for the opportunity to be here today.

First of all I want to clarify that even though I am a biologist and my work with wildlife and the environment is done under very rigorous protocols, this is not a scientific talk.

This is a personal experience which I would like to share because I think it is important that all the people, who in any way are interested, worried or doing something for this planet and its future, get together to know each other, support each other and complement each other.

This is also an invitation to learn more about the environment, to explore ways to help it and to implement useful practises that could reduce our impact on it. For us, this is very important because at the end of the day, nature is the ultimate wildlife shelter.

#### A BRIEF HISTORY:

During my days of uni in Colombia, many, many years ago, we studied Australian native animals as part of the general curriculum. At that time for me it was like learning about mythological creatures, so unique, interesting and remarkable, but so far away, that the last thing on my mind was that one day, I was going to be able to look after them in my own home.

I started to work as a "wildlife foster carer" in the year 2000, which is the first step in this business in Victoria, and later in 2003 I was granted a licence as "wildlife shelter operator".

I have a small but very efficient shelter, which has been divided in three sections:

- Nursery/hospital
- Transition room
- Outside aviaries

Caring for our native animals for the past 7½ years has been a privilege, an honour and an extraordinary experience. This work with wildlife has evolved progressively into other activities, which help me to see the big picture, to understand it a little bit better and to act in a proactive way.

These new fields of action that I would like to share with you today are keeping a sustainable wildlife shelter, habitat conservation and environmental education.

#### **SUSTAINABLE SHELTER:**

Running a wildlife shelter is a beautiful activity, but it can be not very environmentally friendly, so I am trying to implement practises that ensure the less possible impact on the environment. The following tips are simple, useful, easy to implement, inexpensive and healthy for the environment.

# 1. Nursery:

- Use environmentally friendly cleaning products.
- Pick up left over food from cages' trays for compost.
- Use two cycling compost bins to obtain hummus from the leftover food: Filling one to the top, then start filling the second one. When the second one is full, the contents of the first one are ready to be used in the garden.
- During the cleaning process of the nursery cages, collect in a bucket the water used for this purpose with the animals excrements.
- Use the bucket contents to water potted plants (fruit trees).

In this way, there is no waste of drinking water for the plants, there is no need for fertilizers, there is no pollution and there is no extra rubbish going to landfills.

From waste and leftovers, organic, natural and free nutrients are constantly provided to the plants, so they can produce delicious fruits.

#### 2. Transition Room:

- Use a self-contained recycling system, which allows keeping the bigger cages clean and eliminating waste of water.
- In this simple system the bigger cages are fitted with a mesh as a floor, then the cages are lifted from the ground with a legged frame and trays with soil and worms are located underneath.
- The animals' excrements and small left over food go through the mesh into the trays to be processed by the worms.
- The produced hummus is a great source of organic matter and other nutrients for the plants.

By using this small replica of the continuous recycling process that occurs in nature, it is easier to keep the cages clean, free of odour and flies, as well as saving water, time and effort.

## 3. Outside Aviaries:

- Use any soft mulch as bedding in the outside aviaries (organic pea straw is very good).
- When the bedding is semi-saturated with the animals' excrements, use it as mulch for gardens (veggie patches, orchards, etc.).

With this practice, we are controlling weed growth, saving water by preventing evaporation from the soil and providing nutrients to the plants. At the same time, we are again reducing any contribution to landfill.

# 4. Responsible Pet Ownership:

Referring particularly to cats, there are people who do not want them at all and there are people in favour of letting them be free and happy. A realistic compromise could be achieved if they are kept responsibly.

If we are not prepared to keep our cats contained, we should not have them in the first place.

There are alternatives to ensure both the wellbeing and safety of the cats and the wildlife alike.

For people that do not care about wildlife, it is important to let them know that contained cats live longer, are healthier, less expensive to keep and do not jeopardise the family's health, compared with cats that are allowed to run free.

Witnessing the suffering, pain and death caused by cats, we need to work towards the education, awareness and proper laws to ensure our wildlife's survival.

Other aspect of responsible pet ownership in our work as carers is not to allow our pets to be in contact with the wildlife in the shelters. Native animals should be afraid of pets in order to have better chances of survival.

With these simple practices within the shelter and also in the household, we are not only helping native animals but also the environment that sustains us all.

#### **RESTORING HABITATS:**

# 1. Habitat destruction:

The statistics regarding the cause of native animals coming in to care in the first place are different for every shelter, due to individual characteristics like location and the type of animals cared for. However, I believe that irrespective of the differences, we humans are still the main cause.

Car accidents, pets, other introduced animals, fences, shootings and animal trading, amongst others, are common reasons for wildlife in distress. But the most detrimental impact in the short, medium and long term, are habitat destruction and development.

With the continuous land clearing, animals have been pushed out of their territories. Roads are built in their migratory routes increasing traffic accidents and disturbed ecosystems means unbalanced populations of many living forms.

The consequences of such complex situations are almost impossible to measure accurately and sometimes very difficult to repair.

On one end of the scale very specialised species are facing extinction, while on the other end, very adaptable species are becoming "plagues"... and there is everything in between.

We all know about the great effort that involves rehabilitating our native animals to give them a second chance in life. But it is very frustrating going through all this process, when the animals do not have a good place to go.

Recognizing the habitat crisis we have created everywhere, I think that we all should take responsibility for that, so I decided to start with myself.

I applied for the "Land for Wildlife" scheme 5 years ago and during the first assessment I discovered that our property had every possible environmental weed. Then I realized that, the damage we are causing is not just from removing native vegetation, on top of that, we are replacing it with exotic plants to create our gardens, and in many cases, these plants have become weeds.

I was determined to recover the property and a simple way to do conservation is following three basic principles:

- Protection: of the remaining natural habitats.
- Enhancing: by removing environmental weeds, for example.
- Restoring: by planting diverse indigenous plants, according with the characteristics of the area.

# 2. Environmental Weeds:

So the first step was removing environmental weeds, but what are they?

In general terms, weeds are plants that grow where they do not occur naturally. These plants can invade different kind of environments threatening both agricultural production and natural habitats.

Weeds threaten the survival of the native plants by competing with them for light, water, space and nutrients. Therefore, the fragile balance and diversity of the whole ecosystem is affected, including the wildlife.

There is an elaborate weed classification, but in general terms they are grouped as:

- Weeds of National Significance: Serious threat to agriculture, the environment or community health and cannot be sold or traded.
- Environmental Weeds: Threat to natural ecosystems, reduce plant diversity and wildlife habitat.
- Noxious Weeds: Requires the control or eradication by the landholder.

It is important to learn more about the common weeds in our area; we could be paying for them and planting them in our gardens. Councils, DSE and local environmental groups are a good source of information.

We removed several tons of weeds without using any chemicals and they were replaced with indigenous plants, according with the characteristics of each area of the property.

### 3. Indigenous Plants:

During the process of selecting and planting indigenous plants, (3000 by now), I started to really appreciate their importance, their splendour and the urgent necessity of them.

This project became an obsession and I started to remove all the plants that were not indigenous, regardless if they were considered weeds or not. To me, they simply didn't belong; they were beautiful but served no real purpose.

So what is an indigenous plant and why are they so special? Indigenous plants are Australian native plants which occur naturally in a particular region. They could be called the local natives.

Indigenous plants are truly important because during thousands of years of evolution, they have perfectly adapted to the conditions of the area where they belong.

All of nature's components, from soil and water to vertebrates, invertebrates, fungi and micro-organisms, have been co-evolving with

the indigenous plants for generations, producing dynamic, yet balanced ecosystems.

There are a great variety of indigenous plants according with the each particular area, including trees, shrubs, climbers, ground covers, grasses and sedges, flowering plants, herbs and aquatic plants.

There are many reasons to plant indigenous plants in our gardens, our parks and wherever possible:

- They are the ideal habitat for wildlife, providing all the resources needed for its survival, like natural food, shelter, hiding areas, etc.
- They are the basis for healthy ecosystems; a balanced plant community promotes a balanced population of animals and other forms of life.
- They need little or no water because they have adapted to the conditions of their area, like soil and weather. This is a very relevant point today, where water is increasingly scarce.
- They do not need fertilizers or pesticides, which pollute the environment, so they are easy and less expensive to maintain.
- They do not become weeds in their areas, like many exotic plants that invade and threaten the natural habitats.
- They reflect the original character of their area, preserving the local identity.
- By growing and planting some rare or threatened species, we can prevent their local extinction.
- They are less expensive to buy, because many indigenous nurseries are run by voluntary environmental groups.

### 4. The Revegetation Process:

Sometimes we believe that revegetation is all about planting trees, but it is much more complex than that. Some simple tips to promote the proper development of a balanced habitat are:

- Finding out the habitat classification of the area, so the plants can be chosen accordingly.
- Taking care of the ground itself to ensure the natural regeneration of the bush.
- Planting all level plants is very important: understorey, bushes and trees.
- Using different species to promote biodiversity.
- Creating corridors to link isolated patches of habitats reducing fragmentation.
- Keeping natural litter, logs and rocks to provide habitat for small creatures.

Our property has one acre, classified as "Grassy Dry Forest" or Box-Stringy bark Woodland, but within it, there are different areas with different conditions, so a mosaic kind of habitats has been created for as many wildlife as possible:

- Woodland: for all sorts of creatures
- Bushes: small birds need them
- Aquatic habitats: for frogs and other aquatic fauna and to provide a fresh drink to local animals.
- Grasses and grass-like plants: especially for reptiles.
- Native lawns: to exercise the young kangaroos.
- Bird baths with an extra little universe inside.

The results of this effort have been wonderful, never wasting water to keep a garden alive in summer, lots of wildlife coming to live in the garden, keeping the original character of the area... and a sense of happiness inside.

### **COMMUNITY EDUCATION, THE NEXT STEP:**

With all this experience, I realised that I had to share it. So I decided to create a place where everybody interested could come and see and feel and get inspired.

Cecily Falkingham, a renowned naturalist and environmental educator, who assessed the property for the land for wildlife scheme, came to help me to design a nature path to walk through the property.

We established 12 stations with different and relevant information such as biodiversity, environmental weeds, indigenous plants, water conservation, indigenous Australians and their relationship with the land, responsible pet ownership, erosion, fire, topography, etc. In fact, thanks to the approval by DSE to conduct educational tours, the shelter itself is one of the stations, where people can learn to appreciate the importance and the fragility of our native animals.

Last year different kinds of groups visited the nature path. Amongst them, the Manningham Council Property Management Course, The Girl Guides, Cecily Falkingham's Bush Walking Group, Land for Wildlife Assessors Team, GLADE Environmental Group and the Wildlife Victoria Course Wildlife Rehabilitation and Husbandry.

This is a free voluntary activity where anybody interested in nature is welcome to visit.

Public talks to spread the message of conservation are also a great tool to educate the community.

#### **CONCLUSION:**

Despite the entire environmental crisis that we are facing, our actions can be an important contribution and a positive impact for this land, its wildlife and ourselves.

By planting the right thing, we could create wildlife corridors all over, reduce the impact of land clearing, help to combat climate change, reduce our carbon footprint, have a positive impact on our waterways, breath cleaner air...

To ensure the long-term survival of our wildlife, we have to ensure the long-term survival of the natural habitat in which they live. At the end of the day, once again, Nature is the Ultimate Wildlife Shelter

When we start to appreciate and respect what has been living and evolving here for thousands of years, we could ensure that our wildlife can survive many generations and we could also ensure that our grandchildren and theirs enjoy the magic and the beauty of this land.

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