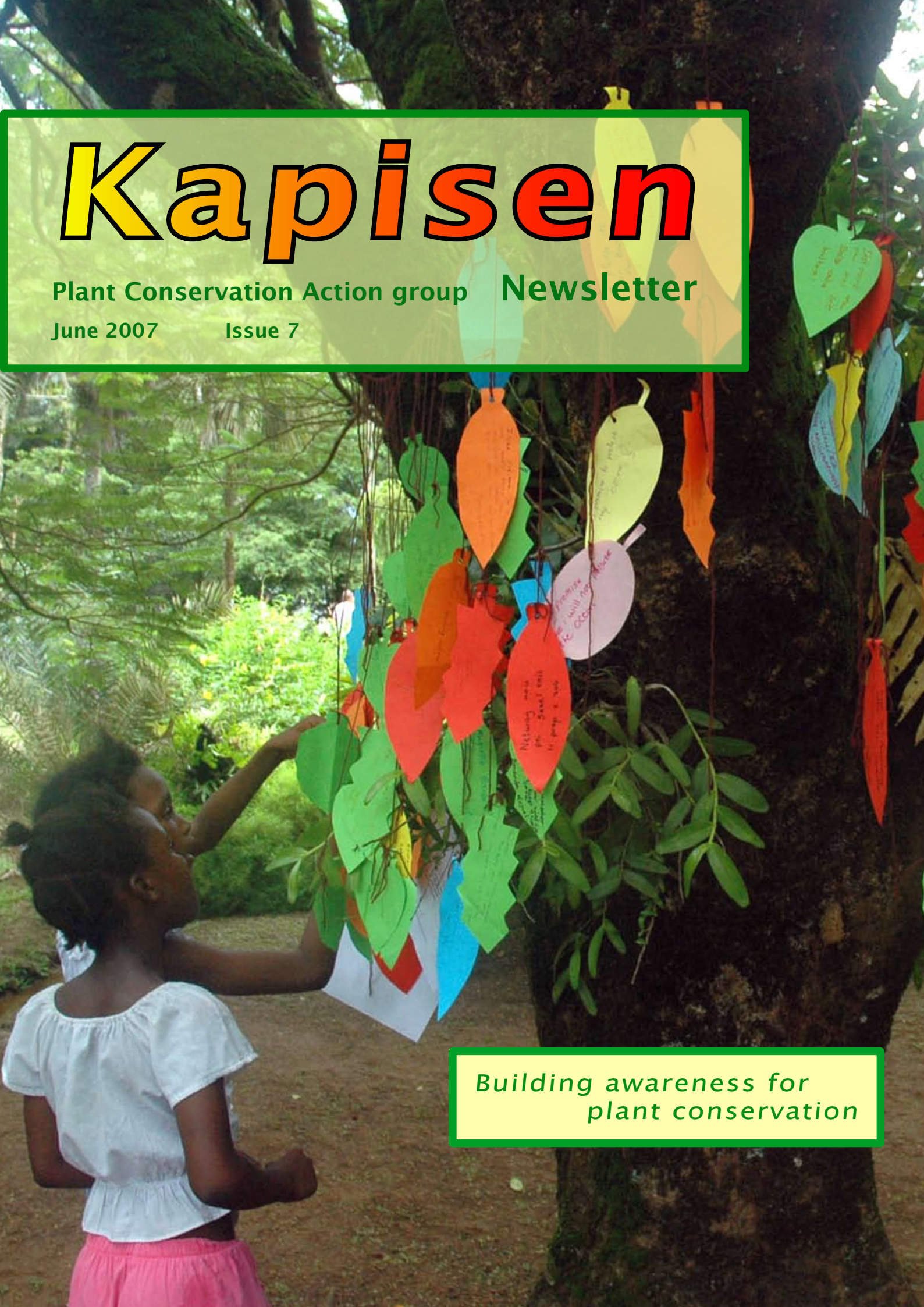

# Kapisen

Plant Conservation Action group Newsletter

June 2007 Issue 7

*Building awareness for plant conservation*

## Education and awareness building for plant conservation

Dear Kapisen readers,

Plant conservation needs the support of many people from different walks of life. Education and awareness building is crucial so that people understand the value of the plant diversity in Seychelles and the urgent need to act. It is therefore not surprising that many targets of the Seychelles National Strategy for Plant Conservation (NSPC) address education (Target 11), awareness building (Target 9), dissemination of information (Target 1, Target 10), and strengthening a national network of organisations and people putting the cause forward in all sectors (Target 12-14). This issue of Kapisen shows how far Seychelles has got along this path. Education and awareness building were identified as strengths of the Seychelles at the NSPC conference, but the momentum has to be kept going.

It may seem self-evident today that many Seychellois are well aware of environmental issues. However, environmental consciousness had to be nurtured by pioneers over many years (p. 15). In some cases advances were substantial (e.g. turtle protection), other problems have been less successful (e.g. littering) so new approaches will have to be devised. One instrument to raise awareness in Seychelles is a national event such as the Earth Day Celebration, that brings people together to address a particular environmental issue, and forces decision makers to state their position; for which they will be accountable later. The latest event was successful in bringing more partners from the private sector into the conservation boat (p. 10). It is this outreach into the different economic sectors, sometimes called mainstreaming, that is particularly important. The article on handicrafts for example (p. 4), shows that although plants have a long history of importance in craftwork, local artisans are still introducing new and creative uses for plant materials. Another sector where mainstreaming of plant conservation has been very successful is the tourism sector. Luxury hotels such as North Island resort have taken up their responsibility (p. 18). Awareness building measures in the tourism sector, such as ecotourism trails (p. 20) and guide books (p. 24), directly enhance the value of Seychelles as a tourism destination, and tourists will learn the importance of plant conservation and take the message back home. After all, holidays are a good time of the year when someone is open to learning and even to life-changing experiences.

Education is the backbone of awareness building. Before long it will be our children who are in charge of deciding and steering the country. Practical activities out in the field are an excellent way of learning about plant conservation, as the example of the tree planting project at Anse Boileau Secondary School (p. 6) and the medicinal plant garden at Plaisance Secondary School (p. 3) show. And good teaching is done by good teachers, such as the young trainee teachers at the National Institute of Education (NIE) who engaged in an environmental education project (p. 11).

Research about plant life and conservation is an important pillar of awareness building. That is one reason why PCA together with the Ministry of Environment is organising a plant conservation research workshop in Victoria at the end of June (p. 23). One example of how research can raise awareness about the value of the natural heritage is Justin Gerlach's article on the unique and threatened flora of Silhouette (p. 13). Silhouette has long been recognized by local and international plant scientists as one of the most unique islands of the granitic Seychelles. It is the only island besides Mahé where mountain mist forests can be found and is the only place where many endemic species survive. It is also the least developed main granitic island and therefore has the potential to act as an archive of how Seychelles has been in the past. Despite its importance, the island is still not protected in any way. This is a gap that has been recognized by the NSPC (Subtarget 4b & 6b). The hope is that data such as that presented here will help in the understanding of that uniqueness.

Lastly, we have taken this special issue on awareness building and education as a motivation to take ourselves a step forward and to make Kapisen a little more accessible and enjoyable. We present for the first time two word puzzles (p. 5, p. 8) and re-introduce our cartoonist Peter Lalande (p. 12, p. 14, p. 19).

We hope that you enjoy reading Kapisen and thereby learn more ways of enjoying plant diversity in Seychelles.

Katy Beaver, Eva Schumacher & Christoph Kueffer

Editors

The electronic version of Kapisen can be ordered from boga@seychelles.net or downloaded from www.plantecology.ethz.ch/publications/books/kapisen

## Our Medicinal Garden

By COLIBRI WILDLIFE CLUB (text & photos)

Fatima HORACE, Mercia SAMSON and Nathanielle LETOURDIE from Plaisance Secondary School S4

After hearing talks from Nature Seychelles and Wildlife Clubs of Seychelles staff and going on interesting visits to local herbalist Mr. Ferdinand Vidot, the Colibri Wildlife Club members asked permission from our former head teacher to use part of the school grounds for a medicinal garden.

We chose an area where the plants can get enough sunlight to grow well and, as it was not a difficult plot to develop, we got started right away by clearing it of grasses and digging quite large and deep holes. This is because the school is situated on reclaimed land, and few plants can grow in the coral fill soil. To rectify that, the members filled up the holes with some red soil mixed with school-made compost. From there, students were given home assignments; to find out from their parents and grand parents about traditional use of the plants and they were each given seedling bags to bring a medicinal plant to the garden. Parents also got involved in the project and directed the club to the National Heritage Museum where we got most of our plants.

The Medicinal Garden project was soon integrated into the Technical Studies curriculum where a whole range of learning and practical skills, such as identification, recording, using equipments and gardening tools, recycling, making better use of bins, marketing products, etc, were developed.

Following the development of the garden other subject areas, such as science, art and languages, took an interest in creating other opportunities for learning.

Children maintaining the garden.

The garden saw its official opening in October 2005 during the Creole festival, with financial assistance through LEAP funding from the Wildlife Clubs of Seychelles. The garden gives the children the opportunity to watch the development of the plants and to understand the cultural value and traditional uses of medicinal plants in Seychelles. We have been particularly curious to observe the growing pattern of the wild ginger which at some point in time disappears completely leading us to believe that it has died. After some time however, it re-emerges with some beautiful, healthy leaves. We have suggested that in future this should be an area of study for the club. Another interesting plant is the “Bwa Malgas” which many people believe never flowers. To our surprise our garden’s Bwa Malgas produced some nice pink flowers last year.

Insects like bees and butterflies, birds like the Colibri and Madagascar fody, are frequent visitors to the garden and we have not been spared visits by invasive pests such as whitefly. For the past two years the medicinal garden has also provided us with a little income through the sale of hot lemon grass

Opening of the garden.

tea during break time which other school children appreciate a lot. Members of staff have found cures in some of the plants to relieve stomach pains, indigestion, abdominal pains and urine infections.

We have even influenced the local community in taking particular interest in the garden where they have come to help with cleaning and introducing other medicinal plants. Our garden made a difference not only by producing a variety of green and colorful plants to brighten up the school grounds but also encouraged our children and others through networking, to explore wider issues relating to the natural world and their community.

# The Creativity of Artisans Highlights the Use of Plants in Craft Work

By Katy BEAVER (text & photos)

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At the end of March a celebration of crafts-people's creativity was displayed at the Alliance Française building. Plants were part of many of the exhibits, as the accompanying photographs show. They reveal ways in which native plant species can be turned into beautiful articles and introduced species can be shown in a new light. The exhibition also drew attention to the importance of not letting old techniques fade away.

All plants used in craft work should be sustainably harvested. This is one of the targets in the National Strategy for Plant Conservation. Another target is to develop novel ways of making use of invasive alien plant species. These photographs show that artisans have the capacity to combine new materials with older ideas and techniques. Plant conservationists should interact with crafts-people to encourage the imaginative use of plant material in a sustainable way.

A selection of timber from various native and introduced tree species is used to create this beautiful tableware and decorative wooden balls. Woods from trees such as Coconut, Kalisdipap, Eucalyptus, Bwa nwar, Bwa zonn, Jackfruit, and Bwadroz were used.

Creative use of a variety of flowers, petals and Casuarina needles! The plant material is incorporated into recycled paper and turned into attractive table lamps.

Imaginative use of introduced plants, namely Coconut, Bamboo, Vakwa sak, Takamaka bourbon and Loofah, all species which can be sustainably grown and harvested.

Baskets of different types mainly made from woven bamboo. The basket at the back is reminiscent of the traditional fish traps woven from the same material.

A wonderful mixture of introduced and native species creates a table display of dried plant material.

Small useful containers made from the leaf base of an endemic palm (Palmis, *Deckenia nobilis*). In the past, much larger containers made from this material were used to hold water and as 'wash basins'.

## Seychelles Endemic Plants Word Search

| Y | N | N | A | T | N | O | M | D | B | R | E | L | V | R |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| E | L | O | Y | A | G | A | S | A | W | B | N | E | M | E |
| F | A | A | L | K | A | L | O | U | A | O | L | E | B | M |
| I | T | T | Z | O | L | I | K | E | R | U | R | O | A | D |
| T | A | O | I | K | S | B | N | A | O | L | K | P | L | O |
| P | N | P | S | S | R | A | M | K | U | A | O | B | E | K |
| N | N | N | I | K | A | Y | R | L | Z | U | W | E | R | O |
| O | Y | N | T | O | E | R | T | A | D | A | L | A | B | K |
| R | E | A | R | Z | M | N | L | G | P | B | M | W | R | P |
| A | N | Y | O | M | A | A | R | O | R | A | A | B | A | K |
| M | F | L | N | F | D | A | N | I | R | D | W | L | Z | A |
| E | E | A | O | N | N | M | D | E | F | A | M | K | W | T |
| F | Y | L | A | B | W | A | M | E | D | I | Z | R | A | O |
| A | O | S | W | I | W | O | R | O | S | O | N | E | R | V |
| K | N | A | O | B | A | B | U | N | E | S | I | P | A | K |

Find the following Kreol names of 29 of Seychelles' endemic flowering plants in the above table. Words can read across in either direction, up, down or diagonally. Note that many woody plants are called 'Bwa' - in some cases the 'Bwa' is included, in others (shown with the 'Bwa' in brackets) just the second part of the name is found in the table. Have fun!

Bwadfer
Bwa dir ble
Bwa dou
(Bwa) kalou
(Bwa) kato
(Bwa) koulev
(Bwa) mare (pti fey)
Bwa mediz
(Bwa) merl
Bwa ponm
Bwa rouz
Bwa sagay
(Bwa) sandal
(Bwa) sarlo
(Bwa) sitron
(Bwa) zoliker
Kafe maron pti fey
Kapisen
Kokodmer
Kolofant
Lalyann potao
Latannyen fey
Lerb razwar
Lerbdmontanny
Lozey maron
Mapoudgranbwa
Palmis
Vakwa parasol
Zakobe

When you have found all the names, 21 squares remain unused. If you take the letters in these 21 squares and sort them out, you can make the names of two more endemic plants:

a) _ _ _ _ _ _ _ _ _ _ b) _ _ _ _ _ _ _ _ _ _ _ _ _

## Tree Planting

Vanessa ROSELINE, Nature Lovers Club

Anse Boileau School, Mahé

The Anse Boileau School Environmental Club has been in existence for the last ten years. During its existence it has participated in numerous environmental projects both at school and at national level.

At national level, the Club is actively involved in helping the Ministry of Environment to realise the recently set up Biodiversity Centre located at Barbarons on the West coast of Mahé. At the Centre, the club has been allocated a special corner, where we are allowed to grow endemic and indigenous plants. So far, about a hundred species of plants have been planted, including plants like Bwa dou, Bwa siro, Bwa dir and Pti prin. Once a month the club visits the Centre to see how the plants are growing and also to grow new ones.

Furthermore, the club is implementing a coastal management project along the stretch of coastline just opposite our school. Numerous trees and creepers (Patatran) have been planted on the beach to try to reduce the rate of beach erosion. The project is bringing positive results as erosion on the beach has been reduced considerably.

In our continuous efforts to improve the environment of our school, we have plans to set up a medicinal plant garden.

As a club we are very much committed to the protection of our environment. Through these activities we are not only helping to create a greener Seychelles. We are also contributing towards the protection of endemic plant species. The trees we have planted provide shade and create new habitat for animals. They also help to arrest the problem of coastal erosion and most important of all, help to arrest the problem of global warming which is a real concern to all of us.

***KAPISEN*** visited the Anse Boileau environment club to meet with some of the club members. We discovered that they too have been doing their own outreach! Recently, during the visit of the 'Peace Boat' to Seychelles, the club members hosted a group of visitors from the boat and showed them their coastal tree planting project and also around the Biodiversity Centre. Peace Boat passengers come from many countries but are predominantly Japanese and Korean, so they were happy to have an interpreter around! Passengers join the boat as it voyages around the world spreading the message of peace and non-violence, respect and understanding, sharing and solidarity, and preserving the planet.

***KAPISEN*** asked each of the six students who were able to stay for this meeting what they have learnt as a club member. In the boxes are some of their answers.

### What have you learned about plants?

"I've been able to learn the names of different species of plants which I didn't know before"; "different endemic species, for example the kinds of palm trees"; "especially the palm trees"; "about the plants which can only be found on Aldabra". "I learnt that if there are no plants there is no life because there will be no oxygen".

Students taking part in the meeting with ***KAPISEN***: Garry Apposamy, Shariffa Confait, Travis Julie, Christopher Morel, Vanessa Roseline, Irene Savy.

## Has being a member of the club changed your attitudes towards the environment?

"It helped me to become more conscious of how important the environment is to every human"; "how the environment is very important to us, so that I can teach my colleagues also what they are doing when polluting the environment"; "as other people see us protecting the environment, I hope they will also take the same path"; "before I didn't know why we need to protect our environment, now I very much look forward to participate in activities related to the environment"; "helped me to think positively about the environment".

## What skills have you learnt or developed?

"I have learnt how to plant a tree and how to take care of it"; "what to include in the soil so that the plant grows well"; "how to plant trees on the beach to help against beach erosion"; "how to identify a plant by just looking at its leaves and fruits"; "improve my public speaking, through meeting new people all the time".

## What club activity made you say 'This is great! I really enjoyed this'?

"I like meeting a lot of new people, e.g. when participating in competitions"; "when we participated in the song competition, even if we did not win our participation counted and that made me very happy"; "we always have this winning attitude!"; "when we participate in a competition it makes me feel proud"; "I like how we get to plant our own plants"; "when I went on the Peace Boat, it was so amazing".

## What have you learnt or enjoyed through working as a group together?

"I enjoyed being part of the group for the singing competition (for the SUBIOS festival)"; „I enjoyed being able to work in groups to help write a song for the song competition"; „it helped me to develop leadership skills"; „we took part in many competitions… for the wetland quiz we won first prize!"; „When we are together we become one, we think as one….. we have team spirit"; „it helped me to know how to interact and face difficulties that came upon us".

## A little story told by one of the club members

"After being in the environment club for sometime, once I was driving around in the car with my family. After we ate snacks, my mum threw the packets out of the window. I said 'Mum, don't do that! See how beautiful our country is and you're just polluting it. Mum, you've hurt me. Promise you won't do it again.' And she was impressed about how much I was concerned."

## Patatran Network

By Katy BEAVER
kbeaver@seychelles.net

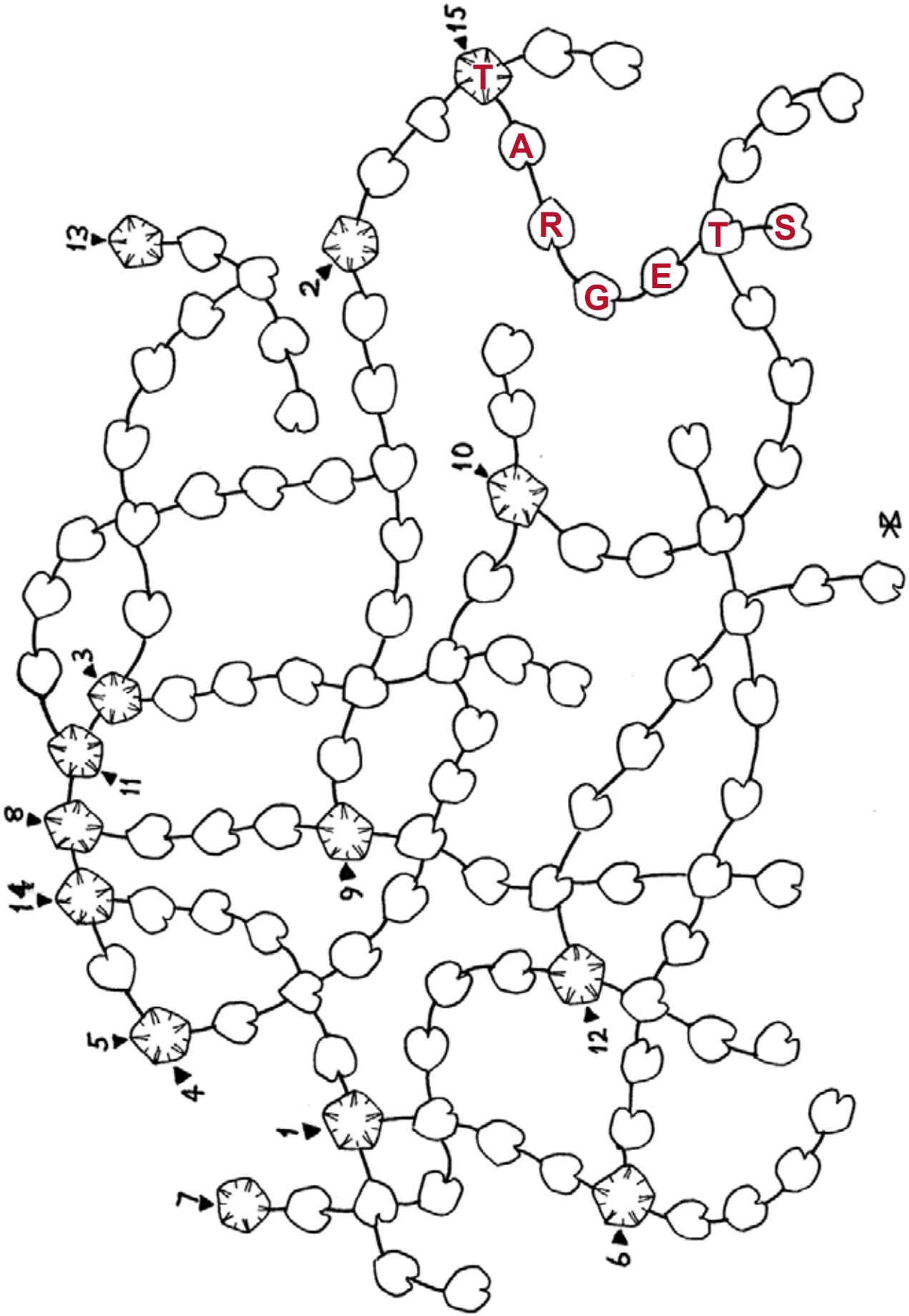
Here is a Patatran creeper that needs untangling! This native creeper represents key concepts of the National Strategy for Plant Conservation. Each of the flowers is the starting letter of a separate word. Each word is a key word in one of the 14 Targets of the Strategy. Place one letter of the word in each leaf. The 15th word is done for you.

**Clues for Patatran 'network'**

1. 'Furthering our _____ of Seychelles' plant diversity' (some plants we know well, others are less well known)
2. 'Evaluating the _____ of native plant species' (is a plant rare and threatened or is it common?)
3. 'Enhancing plant _____ in Seychelles' (this is what many scientists do)
4. _____ of threatened plants can be done in-situ or ex-situ
5. Conserving ____ _____ is important in agriculture for our food resources
6. 'Linking _____ with plant conservation' (it is important to have laws that protect natural sites and native plants, and laws to keep out new alien species)
7. Finding ways to control invasive _____ _____ is important for protecting native plants
8. The harvest of valuable plants used for timber, medicine, souvenirs and handicrafts must be _____
9. Using the media is a good way to increase public _____ about plant conservation
10. Making _____ about plants more widely available will help people to learn more
11. Environmental _____ in schools is well developed but for plants more is needed
12. We need trained botanists and conservationists. This is known as 'improving local _____
13. 'Increasing ____ for plant conservation' (all this NSPC activity requires money!)
14. Better _____ will help to achieve NSPC targets (think of a spider web or multiple links)
15. The NCPS identified 14 _____ or goals necessary to improve plant conservation in Seychelles

Flowers are the starting point for seeds. These Target words are the seeds that develop into actions, and through our actions we grow into a network of interwoven outcomes that will carry forward plant conservation in Seychelles.

However, if sorting out this native creeper looks confusing, try untangling invasive creepers (real ones, that is)!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## Earth Day Celebration 2007

By James MOUGAL assisted by EIC section, Department of Environment

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Don't let anyone tell you that one person cannot make a difference!

It is now a tradition to celebrate Earth Day on April 22. This year the Department of Environment joined forces with the Anglican Church of Victoria and the Ministry of Education to organise a commemorative event under the theme **"Be the generation that woke up, and did something … and changed the world we live in"**. We decided to take this message through the streets of the capital, Victoria, and conclude the march with a special spiritual ceremony in the Botanical Garden. The photos reflect a successful event and the boxes contain some of the key messages and pledges made on that day

### Pledges from the children and educators

*"We will protect our forests and live in harmony with nature" Janice and Olivia*

"Pou protez nou bann plant ek zannimo andemik e rar" Jean-Luc, Bradley and Angela

*"To recycle my waste and stop polluting the environment" Hamora, Stephanie and Derick*

"To protect, preserve and use the earth that God gave us wisely" Silhouette Island School

*"To teach and sensitize pupils on ways of protecting the environment" B. Allisop*

"To give a helping hand in the protection of the environment" Mary

The PS for Education looks at individual pledges written on beautiful coloured 'leaves' on a tree in the Botanical Garden (M Vély)

### Banner messages chosen by the private sector

"Sustainable development allows natural resources to regenerate"

*"We cannot afford…to think of the problems of our own society as if we are alone in the world"*

"To continuously bring forth our support towards protection of the environment for the generations to come"

A member of the Baha'i Faith with his placard (M Vély)


Some of the many children who participated in the march (photo: EIC section)

### Statements by government officials

"To be exemplary in my job as Minister responsible for Environment so that I always set a good example for all Seychellois" (Minister for Environment)

*"En lanvironnman prop i garanti en bon lasante" (PS for Health)*

«Pou kontinyen edik nou zanfan lo lenportans preserv nou planet» (PS for Education)



Two of the 20 sponsored banners that decorated the town's streets (EIC section)

Seychelles first lady (centre) writing the pledges with the children (M Vély)

### The priest's final prayer

"As the air sings with songs of glory, as the water flashes with the silver creation, as the forest blooms with leaves for healing of nations, so may God's light and love fill our hearts, souls and minds"

Father Brian Volcère

**"One generation plants trees…**

**another gets the shade"**

## Creepy Invaders

Marion ETIENNE, Bethina BALETTE, Maryse DIDON, Tamara BARRA, Jenny HAIDEE

Year 2 Secondary French group, National Institute of Education (NIE)

In our studies at the National Institute of Education, the environmental education unit is where we get to learn and participate in different activities focusing on our environment. For our group project during the first term of this year, the five of us decided to work on invasive plants as our problem. The invasion of plants, especially creepers, has become a major setback for our natural environment recently. We wanted to know the underlying causes for the sudden explosion of invasive plants and for how long this has been a problem. We therefore embarked on a journey of getting to know the invaders and centering our project on it. Our project goals were to sensitize people about the consequences of invasive plants and to show our concern about what is happening to our environment.

For our project, we decided to set up two main actions. The first one was to plan and carry out the eradication of some invasive plants in a specific area. We selected Mont Sebert as a hot spot to eradicate the invasive plant "Fowatouk". The second part was to set up an exhibition showing various invasive plants, drawings, information about them (their history, how they were introduced, how to get rid of them etc), articles, leaflets and games.

Prior to carrying out our tasks, we put notices around the NIE buildings, inviting other students to join us at Mont Sebert and also informing them about what we were going to exhibit. We managed to get two environmental officers from the forestry unit who assisted our group up Mt Sebert. We were expecting other students of the NIE to join us in this adventure but unfortunately no one turned up. Even with the rain falling heavily we found our way up the

hill while cracking jokes just to forget all our worries and difficulties with the assignments we needed to hand in the next day. Through our action we learnt many new things and discovered a lot of rare/ native plants apart from the invasive ones. Even if some of us already knew a lot about invasive plants, others gained a lot of information. For example, some of us did not know that “Gouyavdsin” was an invasive plant but we enjoy eating it since it is very delicious! We also learnt that there are two types of “Watouk” species, the real and the false one. The false is the invasive species and one fascinating or extraordinary fact is that its leaves can grow small plants, as well as its seeds. It is therefore essential to destroy the plants on site or be very careful when transporting it since it spreads very easily.


Our Creepy Invaders exhibition at NIE (Michele Martin).

For the exhibition, all of the members of our “Creepy invaders” group participated actively in the preparation of materials and the mounting of displays. We brought live invasive plants to decorate our exhibit. We were aiming to attract as many viewers (students, lecturers, outsiders) as possible and even the media. We were very happy that we had many visitors who showed much admiration for our display, including the Principal Secretary for Environment and Assistant Director for Studies at NIE, who both showed much interest in our project. We tried as much as possible to explain to visitors whatever we know or learnt from the project. We even had the opportunity to be interviewed by the media whereby we explained the main aim of our project. Several Secondary students also paid a visit to our display and participated actively in the games that we had prepared.

Overall, the project allowed us to deepen our know–

Group members and Forestry rangers at the base of Mt Sébert (Michele Martin).

ledge on this issue. We learned a lot about invasive plants, and gained and lived many experiences. Thinking about how we might use this kind of service learning approach after graduating as a secondary school teacher, we know it won’t be easy as a language teacher; but we can now devise our own text based on real information and design activities using this text. Through this project we learnt that cooperation, collaboration and determination are needed and that each one should take her responsibility so that in the end we can all be satisfied. Team spirit and unity is the key to our success despite some setbacks and the rain. We were all determined to reach our goal!

***Peter’s Plants***

## Exploration of the Anse Mondon Valley

By Justin GERLACH, Nature Protection Trust of the Seychelles (NPTS)

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The Anse Mondon valley on Silhouette has long been known as an exceptional reservoir of biodiversity. Interest in the area started in 1985 when Dr. Francis Friedmann discovered a forest of *Pisonia sechellarum* trees at the top of the valley. The exceptional botanical riches of this forest include species endemic to the valley: *P. sechellarum, Piper seychellarum* and *Psychotria silhouettae*, threatened species now largely restricted to the valley: *Pseuderanthemum* aff. *tunicatum, Achyrospermum seychellarum* and a Silhouette endemic with a large population in the valley: *Acacia pennata*. There are also other species of rare plant present in the *Pisonia* forest: *Amaracarpus pubescens sechellarum* and *Trilepisium gynandrum*. The significance of this forest led to the Oxford University Silhouette Expedition 1990 spending 3 months researching the ecology of the forest, work which established a baseline for all future monitoring.

Further discoveries were made in 1996 when Pat Matyot and Maureen Kirkpatrick explored the valley from sea level, locating a population of the critically endangered *Impatiens gordonii* (at the time known from only two plants on Mahé). The *Impatiens* area supports somewhere between 100 and 200 plants. This site has been visited several times in the course of research into the *Impatiens*. During one visit *Piper seychellarum* was found growing at mid-altitudes, with a notably different growth form from the *Pisonia* forest population. This form resembles *P. nigrum* and grows profusely on the gigantic *Heritiera littoralis* trees in the river bed.

During another visit in March 2003 several small *Gastonia sechellarum* trees were located and a single *Carissa edulis*. Both are very rare trees and these represented notable locality records. This visit indicated the potential interest of the unexplored area between the *Impatiens* area and the *Pisonia* forest. However, the lack of any vantage points made it impossible to determine exactly where we were in the valley and how much time would be required to locate the *Pisonia* forest.

On 8th April 2004 a full-day's exploration of the valley

A patch of the very rare endemic sub-shrub *Amaracarpus pubescens sechellarum* (Rubiaceae) in the understorey of the Pisonia forest on Silhouette (J Gerlach).

was undertaken, starting from Anse Mondon. Above the *Impatiens* area the valley is filled by large boulders, covered in birds-nest ferns and *Pseuderanthemum*. Trees were dominated by a mixture of the invasive Cinnamon, smaller *Heritiera littoralis* and varied fig species. Several small *Gastonia sechellarum* trees grew in amongst the boulders and one exceptional tree was found, some 20m tall and with a 50cm diameter trunk. A similar height tree of this species had been seen before growing in a crevice on the south coast of Silhouette but this was of the typically slender growth form. The Anse Mondon valley specimen indicates that *Gastonia sechellarum* is naturally a large forest tree. At this altitude (350m) forest cover was dominated by the endemic *Northea hornei*, replacing much of the *Cinnamon* forest and most of the *Heritiera* trees. The understorey contained *Gastonia sechellarum* and large numbers of *Canthium carinatum* and *Tarenna sechellensis*. One large tree of *Carissa edulis* was found and numerous *Grisollea thomassetii*. A small number of *Platylepis goodyeroides* orchids were found.

At 400m altitude large *Ficus* trees dominated the forest, one of these was found to be in fruit, the fruits clustered together in patches on the trunk. This strange fruiting form (cauliflory) had been seen in the *Pisonia* forest in 1990 but never satisfactorily

identified. Material was collected and has now been identified as the high-altitude species *Ficus bojeri*. Interestingly these plants are considerably larger than *F. bojeri* seen elsewhere, reaching to 20m rather than the usual 5-15m. The first of these trees was found at the same altitude as the first of the *Pisonia sechellarum* trees. Four of these were found outside the area that was defined as the *Pisonia*

The buttress roots of an old Bwa de table (*Heritiera littoralis*) tree in the Anse Mondon valley (J Gerlach).

forest in 1990. At the bottom end of the *Pisonia* forest a small *Amaracarpus pubescens sechellarum* tree was found. This was of great significance as *A. pubsecens* was known from only two plants, one at the top of the *Pisonia* forest and one on Mt. Dauban. Eventually 8 new *Amaracarpus* plants were found, increasing the known population of this species to 10 individuals. These plants varied in size from 40cm to 2m tall, all looking very vigorous and two with single fruits on them. The two 2m tall plants are 0.5m taller than this species has been recorded previously. The ground throughout the *Pisonia* forest and for some 300m below it was densely carpeted with *Pseuderanthemum tunicatum*. At the top of the *Pisonia* forest the largest known *Psychotria silhouettae* plant was in full fruit and flower and was measured at 2m tall.

The valley was explored completely again in March 2007. On this visit all the previous observations were repeated with the additional discovery of a second small population of *Impatiens gordonii* (some 200m further up the valley, numbering about 20 individuals) and a 11th *Amaracarpus pubescens* plant. Several seedlings of *Pisonia sechellarum* were also found. Several seedlings and small saplings of *Trilepisium gynandrum* were found but no adult trees located.

Notable features within the *Pisonia* forest on these visits were the increase in the numbers of young trees since 1990, these include 8 of the 10 *Amaracarpus* plants in the forest growing in areas frequently visited in 1990 where they would have been noticed had they been present. The cover of *Pseuderanthemum* has increased notably. There were also many young *Pisonia* trees, in marked contrast to 1990 when no young trees or seedlings were found and it was believed that there was no recruitment of this species.

In conclusion the flora of the Anse Mondon valley is healthy with many mature trees of several rare species and extensive regeneration of endemic species. The changes recorded in the *Pisonia* forest since 1990 indicate that the high forest ecosystems should not be regarded as static and that rapid natural change can occur in the absence of disturbance or new invasion.

***Peter's Plants***

## Reaching out to the Seychellois People: 50 Years of Environmental Education

By Katy BEAVER, Willy ANDRE, Lyn BASTIENNE

We tend to think that education and awareness about the environment is a 'new thing' - and to some extent that is true - but most things have a history and a basis for their effectiveness. And awareness-raising about plants in Seychelles is no exception.

Fifty years ago, many people learned their work 'on the job'. There were few special training courses. For example, new forestry workers learnt planting methods from their more experienced colleagues. They learned how to make bamboo pots for larger plants, with holes to allow roots to grow through into the surrounding soil when they were planted out. They made 'Vakwa' leaf pots for small seedlings (these were bio-degradable and rotted away as the seedling grew, unlike the plastic pots used these days!) and they learnt the correct way to plant seedlings out in the forest so that they would have the best chance of survival. Learning practical techniques such as these is best done in the field with skilled people. This is still true! Workers at the Biodiversity Centre at Barbarons, home gardeners and agricultural workers all learn through watching, practicing, asking questions and learning from their own experience, even though some theoretical or written material may also be used.

Even eradication campaigns, such as this one to remove invasive Clidemia plants, have a long history (EIC Section, MENR).

However, special practical demonstrations and courses do help farmers and gardeners to learn new or improved methods. Even in the 1950s this was happening. Demonstration gardens were set up in 1950 at Union Vale and Mammelles and four leaflets were published for farmers (including one on composting). An agricultural show in 1952, held in Gordon Square (now Freedom Square) "attracted a large number of visitors". Also in the 1950s, radio broadcasts reached a small audience and "Agricultural Notes" was started in the Government Bulletin, which helped to spread ideas. Later, when radio reached more people and many more farmers were literate, there were weekly agricultural broadcasts and "Agrinews" was a monthly production. During the visit of HRH Duke of Edinburgh to the Botanical Garden, where he planted a Coco de Mer, the many people who attended this ceremony were allowed to take "cuttings and off-sets" from the Garden without charge. The Garden was also the site for an exhibition on improved produce quality, pest control, etc. and there was "good attendance by school children and adults".

Agriculture was economically important at the time and agricultural extension work had become general practice, so perhaps it is not surprising that these activities lead to similar approaches when Environment became a separate Department of the Agriculture Ministry in the 1970s. And as you can see, the current Agricultural Shows held annually in June have a long history! But they now reach out to many more people and in a variety of areas, from horticulture to craft work, from pest control to flower arrangement. As another example, earlier this year the Biodiversity Centre ran a course for gardeners on how best to propagate plants.

Another method of awareness-raising is through campaigns and these too have a history in Seychelles! Fifty years ago, forestry workers earned R30 per month - not per day, per month! They did get perks, such as two bunches of firewood per week, which they could use for cooking or to sell to others. But there was another rather unusual source of income… At the time, rats were a huge problem in the coconut plantations as they were responsible for the loss of millions of nuts. Workers could make extra money by catching rats in 'lasonmwar' traps (see Kapisen Issue 6) and selling the dried tails! The government had several rat eradication campaigns over the years. The results of these campaigns make interesting reading. In 1947, when the price went up from 2 cents to 5 cents, 120,000 rats were caught, and a further 134,000 in 1948. After that, numbers

averaged about 46,000 until in 1963, with a new campaign and an increase to 10 cents per tail, the numbers shot up to 152,776 rat tails handed in! The next few years saw a decrease once more - in 1971 the number was only 4,244 rat tails - until the 1980s, when the price went up to R1 and the campaign again brought in more rats. What does this tell us? Campaigns work!! Rat numbers were reduced after both campaigns and an increased reward made people more likely to participate. Maybe it wouldn't work quite so well for rat eradication now as people are more health conscious and wary of handling rats because of leptospirosis, but doesn't it also work for recycling bottles? Increase the price on an empty bottle and more people are likely to collect them rather than leaving them to litter the environment.

Coming closer to the present, we see the gradual development of Environmental Education in schools in the 1980s and 1990s, and a much greater emphasis on environmental issues amongst policy makers, as the mainstay of the economy changed from agriculture to tourism. With greater awareness of the need for environmentally sustainable development, there came a greater need for creating awareness in the general public, as well as children. Hence the setting up of the Education, Information and Communications (EIC) Section within the Environ–ment Department in 1992. This Section is responsible for planning, producing and coordinating a wide range of projects and programmes - from fortnightly radio and TV programmes ('Nou Lanvironman' and 'Karnen Lanatir') and newspaper articles, to campaigns


The EIC Section coordinates activities such as raising awareness about the importance of wetlands - here an Environment staff member is revealing the secrets of a marsh to teachers and school students (EIC Section, MENR).

on for example the dangers posed by alien plant species, the important roles played by freshwater marshes and the importance of protecting turtles. It also liaises with other government bodies, NGOs, community clubs and the private sector and provides information, resources, awareness talks, training and guided tours. EIC maintains a Documentation Centre for environmental literature and resources and mans a 24-hour GREENLINE service (Tel 722111) through which Seychelles residents can report any environmental incidents, complaints or suggestions, as well as ask for advice. Truly those early awareness programmes have developed a long way.

## A Well-Known Face in the Seychelles Environment Scene

Based on a ***KAPISEN*** interview with Lena DESAUBIN

In the early 1990s, the need for a unit for public information and awareness was promoted by consultants who were assisting with the development of the Environmental Management Plan for Seychelles. The new unit within the Department of Environment was set up in 1992 and Lena was recruited in 1993. To begin with she was working more or less alone but by 1995 Seychelles was already involved in the 'Clean Up the World Campaign' and soon other issues were being tackled, such as beach-sand poaching and turtle poaching. At the same time, the Ministry of Education was realising that Environmental Education in schools required greater development and an EE Coordinator was recruited (Jeanette Larue). Through cooperation, the Eco-School Programme was developed. The star prize for the competition was a trip to Aldabra Atoll, the World Heritage Site, so schools had a real incentive to participate. But of course, all of this required a lot of hard work and preparation!

By this time Lena had also set up links with the media, so that environmental themes could be aired through regular radio and TV programmes, with 'spots' on particular issues. An additional outlet was newspaper articles, particularly the weekly Environment Page in 'Nation' newspaper. Also, the telephone 'Greenline' was started. But by 2000 there were still only 2 people in the education section

and a small budget, so it was quite a struggle to achieve what she wanted to do. Lena therefore welcomed encouragement by people in the Ministry of Environment who understood the importance of the media in promoting environmental themes and issues. As a result, the section enlarged to 3 people directly involved in education and awareness. Soon there will be 2 more, in a new audio-visual unit within the EIC section, so that environmental spots and programmes can be produced for both local and international distribution. Lena spoke of the team spirit within the EIC section being one of its real strengths.

Asked about the EIC section programme she thought was most successful, she immediately said the Turtle Campaign of 2003. At the time, several turtle poachers had been caught but the court dismissed the cases and the poachers went free, which disturbed a number of citizens. Discussing why the Turtle Campaign had been so successful, we concluded that all the important elements had been in place - the law protecting turtles was in place (in spite of its short-comings); the Greenline telephone was up and running; children and communities had been sensitized by special community and school programmes, of the need to report turtle poachers; sponsorship from the private sector was there; special T-shirts and banners were prepared; and on the day of 'The Turtle March', individuals, schools and organisations turned out in force. When the procession reached the Court House, it stopped and everyone shouted so loud that the judges came out to see what was going on. It was not long afterwards that the law was amended and some turtle poachers were put in prison, which made all the hard work seem worthwhile.

Lena being filmed while she showed primary school children how to make a simple abacus with used bottle tops. This formed part of a TV programme on recycling (EIC Section, MENR).

Maybe plants do not raise such defensive feeling in Seychellois minds but it is interesting that a series of programmes that Lena produced on herbal plants proved a winner with the TV watching public - perhaps because it touched on cultural and heritage aspects which are part of the everyday lives of us Seychellois. As a result, she received many comments and suggestions from people on the street. Other plant issues covered have been the negative impact of alien invasive creepers and alien plant species in marshes.

And the most difficult issue to tackle? Waste and litter! In spite of all the programmes and clean-up campaigns, somehow education by itself doesn't seem to have worked and Lena thinks that perhaps enforcement of some kind is necessary - spot fines for littering perhaps or fines for dumping.

On a more positive front, Lena has come to realise that it is mainly through personal contact, through going out and talking to people, that one can convince both individuals and organisations to participate in, and sponsor, campaigns. For example, if EIC can produce the banners or the leaflets and then one person takes these to an organisation and asks "Which banner would you like to sponsor?" there is more likely to be a positive response!

And finally, Lena was asked where her interest in the environment had come from and she replied that her father and grandfather were farmers and land owners, and much of her childhood was spent in close contact with nature. She also became particularly interested in herbal medicine and the cultural significance of plants through her uncle, a herbalist. Being in touch with nature, going out into the forest and working in the garden, are surely some of the best ways to learn about plants. Are people becoming too blasé about the environment? Do we fail to appreciate the beautiful environment that we have in Seychelles (especially when compared with the concrete jungle of large cities)? Lena has played a major role in bringing environmental issues to our attention and in changing our awareness. Let us hope that, as climate change requires us to change our attitudes and our actions, the EIC section will continue to carry out this important role.

# Knowing and Understanding as First Steps Towards General Active Participation in Island Rehabilitation – Experiences from North Island

By Linda VANHERCK, Environment Officer, Environmental Department, North Island
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In 2002, North Island embarked on a rigorous rehabilitation. This involved the eradication of cats and rats. The removal of several alien invasive plant species, and their subsequent replacement by native species, continues until today in accordance with a detailed vegetation management plan.

Essential to the success of this intensive island rehabilitation is obviously the strict prevention of any new unwanted introductions, voluntarily or involuntarily. The Code of Conduct for all staff who live and work on this now rat-free island therefore contains stringent regulations. No-one, including guests and staff, is allowed to bring in animals, including pets. The same goes for plants: only the Landscape Manager and Environment Officer decide which plants need to be brought in for rehabilitation, beautification of the staff village and guest areas, and for the small vegetable garden. Implementation of these prescriptions is strictly supervised by members of the hotel management, as well as the Head of the Mahé Office who supervises boat loading. With the assistance of ICS and input from rodent eradication expertise from New Zealand, alien invader avoidance procedures were drafted and are regularly refined. They prescribe the safe loading and unloading of barges and boats, including the use of a rodent proof trailer for transport to the rodent proof room where cargo and staff luggage are inspected behind closed doors. The Island continues to bring boats and barges onto the beach instead of constructing a jetty, despite the challenges this poses, so as to minimize unwanted rodent re-introductions. Disposal of food waste on the island is strictly limited to two designated areas. Permanent baiting stations are being maintained all along the coasts which are regularly approached by fishing boats.

As time has progressed, the staff in charge have become increasingly aware of the daunting dimension of this task. Indeed, with new, smaller exotic species increasingly being detected on Mahé, alertness and prevention has to go much further than just keeping out rats. Hence fumigation of containers is being systematically done. Opening of containers on Mahé for customs control requires uninterrupted vigilance as unwanted invaders could slip unseen between cargo. All native plant cuttings require pre-treatment, whilst imported timber has to be treated in the country of origin. A good example of just how seriously things are taken, has been the quarantining for three weeks of seven giant Aldabran tortoises brought in from Anonyme, to ensure that no possible chelonian disease would be introduced amongst the resident population, but also to avoid germination of unwanted plants from incompletely digested faeces of the giants.

The strict implementation of all these procedures

In her regular evening presentations to guests, Linda describes the rehabilitation programme on North Island (L. Vanherck).

obviously requires everyone to full-heartedly play his/her active role. Poisoning of boats, for instance, has become a routine part of skippers' and deckhands' lives, whilst Mahé and North Island staff assist with placing traps during boat loading and unloading. Gradually, routine tasks to safeguard the island have been handed over to key staff, therewith purposely delegating responsibility. The Central Store Manager and staff of the Security Department, as well as key Housekeeping personnel, for instance, have been trained for re-baiting and detecting rodent chew marks and faeces in their designated areas, namely the rodent proof room and villas. But no-one escapes from the reality of living on an island determined to keep its rehabilitation on track! Indeed, having to await clearance of all your baggage from the rodent proof room upon each return to the island can be an inconvenience! Yet, how easy it is to introduce a small pest animal or seeds to the island unknowingly

- maybe stuck to shoes or clothes or hidden in the corners of your bag. And when living permanently on an isolated island, who would not be tempted to bring in a nice little flower or herb to feel more at home in the village?

So, to obtain staff's motivated participation, everyone needs to understand the environmental goals, and more specifically the purpose of the alien invader avoidance procedures. Staff awareness raising needs to be on-going so as to get everyone on board even with staff turn-over. The Environment Department takes up this task in the form of talks illustrated with slides, covering topics as diverse as rat eradication, alien plant control, waste separation and littering. Explanatory texts are regularly updated and posted on the staff canteen's environmental notice board. Staff also volunteer on environmental projects, thereby learning about the natural richness of the island and the need for conservation. Environmental awareness raising and environmental education are essential components of staff meetings, during the annual staff party and whenever the occasion arises. The Environment Department designed a game to make the learning process more attractive, and more interactive activities are in the pipeline, as more fun ensures better learning and increased motivation to take up one's role!

In June 2006, North Island went yet one step further in its efforts to motivate people for the need for preservation of the unique Seychelles biodiversity. For

A marine pollution game prepared by North Island for disdvantaged local children visiting as part of their ‚Children in the Wilderness' programme (L. Vanherck).

the first time, the island participated in the Wilderness Safaris' initiative 'Children in the Wilderness', a programme where local disadvantaged children are hosted in the tour operator's hotels and lodges for a few days, during which well-prepared educational fun activities are held by its staff, under the guidance of specialized NGOs and child psychologists Activities held in June 2006 included tree planting, placing shells back into nature as potential housing for hermit crabs, and games on marine pollution and waste separation.

***Peter's Plants***

# Nature Trails: A Wonderful Way to Learn About Plants

By Eric SOPHOLA
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For a long time tourists were enticed to Seychelles for its sun, sand and sea. But it was realized that the mountains and forests are also exciting to explore and are home to interesting flora and fauna. Thus, after the creation of the Morne Seychellois National Park (MSNP) in 1979, a network of nature trails was set up to offer a unique experience to both visitors and local people. When walking these trails, visitors can get to know the plants and animals living there, while at the same time enjoying the countryside, the exercise and often spectacular views.

Over the years the trail network has been improved and there are currently nine trails in the MSNP, one in a forest reserve in the south of Mahé and one on Praslin. It is currently the responsibility of the National Park Unit (NPU) in the Department of Environment to maintain the trail network. As a tool to help disseminate information about the trails and to guide visitors on the trails, the NPU has produced a set of leaflets. Each leaflet contains a map of the area traversed by the trail and information about the route and the ecology of the site. The leaflets are popular with tourists and are published in four languages, so that visitors from many countries can enjoy learning about the forests.

Tourists hiking in the Morne Seychellois National Park through native mountain mist forest at Morne Blanc (E. Schumacher).


Leaflets of the Morne Seychellois National Park nature trails (K. Beaver).

When visitors come to the islands for the first time, they may be a little dismayed by the steepness of the slopes, but some trails are easier to walk, such as Anse Major. One of the main attractions is that you can take a swim on a secluded beach and bask in the sun before heading back. Another easy trail is Glacis La Reserve, in the south. It provides a short leisurely walk through forest and ends on a glacis where you can see the special type of vegetation associated with this kind of landscape, including Bois du lait (*Euphorbia pyrifolia*) and Seychelles vanilla (*Vanilla phalaenopsis*).

For those who love nature and would like to see native plant and animal species in the mountains, there are several trails on Mahé. Perhaps Copolia and Morne Blanc are the most interesting to follow for a half day trip. Along the Copolia trail you can find several endemic palm species and impressive trees such as Bois rouge (*Dillenia ferruginea*), as well as smaller plants such as the insect-trapping pitcher plant (*Nepenthes pervillei*). Morne Blanc, meanwhile, is famous for its mist forest. As you climb higher up the trail the forest becomes moister, with mosses covering rocks and tree trunks. Endemic plants such as Vacoa marron (*Pandanus sechellarum*) and Capucin (*Northea hornei*) are common there. The Glacis Noir trail on Praslin has all six of the endemic palms of Seychelles in the forested part of the trail, as well as some rarer shrub species.

People with a liking for history can visit “Mission Lodge”, a place of great historic and cultural value to the Seychellois, where are the ruins of the school built by the Anglican mission for children of freed slaves. There one gets an insight into the origin of the predecessors of some of the people today forming the rainbow nation of Seychelles. Mare aux Cochons, on the other hand contains relics of the bygone trade in cinnamon oil. The remains of the distillery used for that purpose can be observed there. Other spices that were cultivated then, such as cardamom, can still be found there. A more recent economic activity is tea growing and on the hillside along the Salazie trail one can observe women working in the tea plantation.

If you are looking for magnificent views you should go on the Dans Gallas or Glacis Trois Frères trails. At the summits of these trails you experience a magnificent bird’s eye view of the town of Victoria down below. Copolia offers a similar experience but with scenic Morne Seychellois in the background.

Apart from these nature trails there are other places of interest for nature lovers who want to learn about plants. Quite a number of our native plants grow in the Botanical Garden at Mont Fleuri and identification of these plants is made easier because they are labeled. A place of great importance to us is the Biodiversity Centre at Barbarons, where the plan is to grow all of Seychelles’ endemic plants and some indigenous species. Work is progressing well and its doors will soon be open to the public. Also on Mahé, a place of historic and cultural importance is the privately owned Jardin du Roi at Anse Royale. Here a wide variety of fruit trees and spices are grown, including the four spices of the original ‘Jardin du Roi’ spice garden set up by the French during the colonial period.

A Seychellois enjoying the nice view from Glacis Deros (E. Schumacher).

A place that should not be missed by any plant lover is Vallée de Mai on Praslin. This beautiful forest, which is a World Heritage Site, is home to the unique, world-famous Coco de mer palm and many other endemic species. Smaller islands that are worth a visit because of their vegetation rehabilitation programs are Aride, Cousin, Cousine, Fregate and North. These are all privately owned islands, two of which are run by an NGO.

Swamp at Mare aux Cochons in the centre of the Morne Seychellois National Park (E. Schumacher).

## PCA NEWS

There are some encouraging updates on news that was reported in the last issue of Kapisen. Following the trip by Lindsay Chong-Seng and Didier Dogley to Aldabra, regular plant monitoring has now commenced. The Aldabra rangers are recording the appearance of 3 labelled individuals, currently of 27 native species, 2 of which are rare species. As the dry season progresses, some species loose their leaves, whereas others remain green throughout. The monitoring will record this, as well as whether the plant is producing new leaves, flowering or fruiting, and such observations as the presence of pollinators, rat damage, or new seedlings around the plant. In addition, ranger Alex Underwood, who is also a PCA member, located a rare plant at Cinq Cases around the edges of a sink hole and in the process discovered a trapped female turtle inside. Fortunately the turtle was duly rescued and returned to the sea.

The second update relates to the North Island 5-year Vegetation Management Plan, which has been produced collaboratively by PCA and NI staff, and is now in the final stage, after heroic efforts and many setbacks.

A recent PCA trip took a number of us to the south of Mahé, to explore two rocky knolls above the Grand Police road, where we had heard that there might be pitcher plants - further south than ever previously recorded. We didn't find the pitcher plants (yet!) but we did find a very interesting boulder area with numerous native species typical of glacis vegetation. Although a small area had been burnt in the past, much remained relatively in tact and there was plentiful regeneration of species such as Bwa sagay (*Diospyros sechellarum*). We also discovered a very large nest of the Yellow wasp / Mous zonn (*Polistes sp.*) - with one poor young person taking the brunt of the angry attack. But this is an area worth exploring some more - and not just for possible pitcher plants.

### 3rd Global Botanic Gardens Congress

By James MOUGAL, Botanic Gardens, MENR
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From 16-20 April, I participated in the 3rd Global Botanic Gardens Congress (3GBGC) at the invitation of the congress' Scientific Committee. The 3GBGC was organised by Botanic Gardens Conservation International (BGCI) and several state institutions and governmental bodies of the People's Republic of China, and it was hosted by Wuhan Botanical Garden. The main aim of the meeting was to review the contributions of botanic gardens towards the implementation of the Global Strategy for Plant Conservation (GSPC) and its theme was *Building a sustainable future: the role of botanic gardens.*

The congress was attended by 954 participants from 67 countries. I was among 202 presenters and my presentation was on the development and implementation of a recovery plan for the endangered plant species *Impatiens gordonii* under the topic *Reintroduction: securing wild populations*. Some other topics of importance to the Seychelles were *Access and benefit sharing: how do we share and how do we show it; Promoting the concept of "integrated conservation"; Priorities for conservation research; Botanic garden' contributions in the implementation of CITES* and *Research on plant-based education* - an area in which we really need to do something, possibly evaluating the effectiveness of some of our environmental awareness campaigns.

The congress was inspiring and the case studies were particularly useful to stir up debates (access and benefit sharing issues) or challenge our traditional conservation strategies (climate change is a reality!). The meeting highlighted the important contributions made by botanical gardens in increasing our knowledge on plant diversity, their involvement in recovery programmes and restoration projects and promotion of sustainable use of plants resources.

Despite botanical gardens' relentless efforts, there are many gaps and BGCI as a leading organisation in the implementation of GSPC is already looking ahead with a new five year plan 2007-2012. This will place greater emphasis on recovery and restoration, promote the conservation and sustainable use of medicinal and nutritional plants and address the impacts of climate change. The role of botanical gardens in the future will include monitoring changes in flora and vegetation to provide an early warning system on the effects of climate change and acting as taxonomy centres facilitating local flora catalogues, red data lists etc.

For more details on the conclusions from the 3GBGC visit BGCI website: www.bgci.org

## Seychelles Plant Conservation Research Workshop 2007

Frauke FLEISCHER-DOGLEY (PCA), Denis MATATIKEN (Victoria Botanic Gardens, MENR), Christopher KAISER (ETH Zurich), Christoph KUEFFER (ETH Zurich)

From June 26 to June 29 2007, PCA together with the Seychelles Ministry of Environment and Natural Resources (MENR) and ETH Zurich will host a plant conservation research workshop in Victoria entitled "Synergies between Plant Conservation and Ecological Research".

The workshop's aims are to review past and present plant conservation and research activities and to identify future priorities and synergies between conservation and research. Particularly, the workshop will facilitate collaborations between international and local plant conservationists and researchers, which will strengthen local capacity. Ultimately, the objective is to develop a research agenda for plant research in Seychelles.

The workshop participants will provide a broad range of expertise to plant conservation in the Seychelles. Representatives of the Seychelles government, different NGOs, the education sector and the private hotel industry represent the local plant conservation community. International scientists will share their experience from other oceanic islands (Mauritius, La Réunion, Rodrigues, Azores, Pacific islands, Hawaii, New Caledonia), and from a variety of research areas, including ecology of invasive species, conservation genetics, and plant-pollinator interactions. Plenary presentations from seven local and ten international experts are scheduled, along with group discussions on the following topics: taxonomy; *ex situ* plant propagation; education, awareness, and capacity building; *in situ* conservation of rare species; plant-environment interactions (particularly soils); and biotic interactions (particularly plant-animal interactions).

The workshop will fulfill Subtarget 3a ("to develop a national research agenda for plants") of the Seychelles National Strategy for Plant Conservation for 2005–2010 (NSPC) and will contribute to the achievement of many other targets stated in the NSPC. In particular, there is a lack of documentation on plant diversity (e.g., Subtarget 1a & 1b: national databases for flowering plants and ferns; Subtarget 1d: atlas for important plant areas). There is also a need for more research supporting the conservation of rare endemic species (Targets 2 & 4), the management of invasive alien species (Target 7) and the sustainable use of plant products (Target 8). The strategy explicitly highlights the need to enhance plant research in Seychelles (Target 3). Also, strengthening local capacity is addressed by a separate overall objective (Objective 5).

The workshop will provide plenty of opportunities for exchange of ideas and we hope that stimulating discussions will bear 'fruit' (a research agenda) and 'seeds' that will germinate, enabling research to grow and carry plant conservation in Seychelles to a higher level.

## Content



**Photo front cover**

Children read individual pledges written on beautiful coloured 'leaves' on a tree in the Botanical Garden (M Vély)

see page 10

# New Books

Three new books are now available in Seychelles, one a celebration of plants in the Botanical Garden at Mont Fleuri and the other two about the wildlife of Seychelles, one of them with a third of its pages devoted to plants.

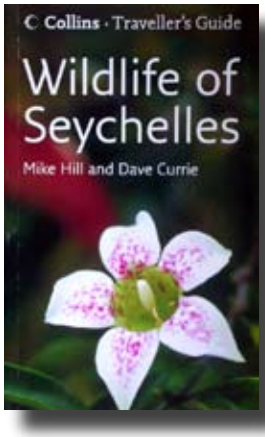
## Botanical Garden Souvenir Guide


The **Botanical Garden Souvenir Guide** by Katy Beaver and James Mougal is a colourful booklet, full of photos of the many different flowers, trees, palms and fruits in the Garden. Most photos are accompanied by brief but interesting notes about the plants shown. The history and roles of the Botanical Garden are described, also the birds and animals found there and of course the giant tortoises and fruit bats are not forgotten. The booklet has a map and is divided into sections according to the general layout of the Garden, which helps the user to locate particular flowers and trees. It is a welcome aid to identification of ornamental, native and economically important plants planted in the Garden, and a lovely souvenir to take home.

Published by the Botanical Gardens Section, M.E.N.R. 2006

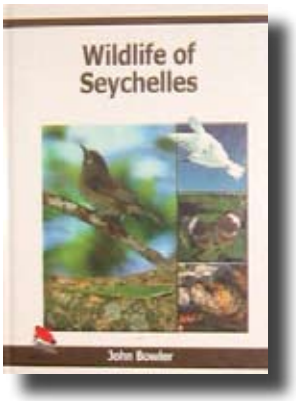
## Wildlife of Seychelles

Both the Wildlife books are much needed aids to identification of the natural life of the islands. Nature lovers in Seychelles have been awaiting such useful books for a long time!




Collins Traveller's Guide: **Wildlife of Seychelles** is by Mike Hill and Dave Currie, who formerly worked for local NGO, Nature Seychelles, which helped to sponsor publication of this useful guide. The vegetation section is subdivided according to habitat and many common species are included, both native and introduced, so it is relatively easy to identify from the photographs plants typical of each habitat. Descriptions include local names, growth form, size and basic, user-friendly, structural details, as well as island distribution and some of the traditional uses.

Published by HarperCollins Publishers Ltd. 2007




WILDGuides: **Wildlife of Seychelles** by John Bowler, does not include a section on plants as it sees Wildlife as animals only, which is the commonly accepted interpretation. However, the photos and descriptions of a limited number of invertebrates are especially welcome (many plants do require insect pollinators after all!).

Published by WILDGuides Ltd 2006

## Join PCA!

Any person interested in plant conservation in the Seychelles, either from the Seychelles or somewhere else in the world, is invited to join the Plant Conservation Action group (PCA). As a member you support plant conservation in the Seychelles, get Kapisen - the PCA newsletter - twice a year sent to you by e-Mail, and get regular invitations to events and field excursions.

For joining PCA, contact Didier Dogley (Chairman) or Denis Matatiken (Secretary) at

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PLANT conservation action group