



## Joey Helping Antalaha



*-An example of deforestation in eastern Madagascar.*

**Macolline, C.A.L.A. and JHA FUND** are a consortium of NGOs working together towards reforestation and \*silviculture in Antalaha, Madagascar.



### **MACOLLINE Botanical Trail**

The APM Institute (Association for Protection of **Macolline**) was originally established for the reintegration of former leprosy patients in Antalaha, which resulted in the creation of this “forest for education”. Also, now a restauration for Macolline and surrounding forests in distress.



The **C.A.L.A.** Association (Leprosy Relief Committee of Antalaha), consist of leprosy survivors that help manage the Macolline Botanical Garden, giving work to the physically challenged victims at the same time as integrating them back in to the social and economic life of the region.



*-Tree nursery managed by C.A.L.A. leprosy survivors and their families.*

JHA FUND's mission and purpose with Macolline is to raise awareness, facilitate and educate as many teachers and students as possible about conservation, nature, reforestation and the use of "green charcoal" by using Macolline as a learning tool along with our \*ecopedagogy educators/guides. Macolline manages the largest collection of trees and plants in Antalaha and is engaged in initiatives to promote green projects.



*-Planting a flamboyant tree. ~Delonix Regia*

\* **Silviculture** is the practice of controlling the establishment, growth, composition, health, and quality of forests to meet diverse needs and values. The name comes from the Latin silvi- (forest) + culture (as in growing).

\* **Ecopedagogy** is a discourse, a movement, and an approach to education that has emerged from leftist educators in Central and South America that seeks to re-educate "planetary citizens" to care for, respect and take action for all life.



*-Josianne collecting clove seeds to harvest.*

### Current activities at MACOLLINE

- Provide work for former C.A.L.A. leprosy patients with physical disabilities, as well as their families
- Several reforestation projects throughout the commune. In total, we have planted over 185,000 trees: Belfort village < 30,000; Jules village < 20,000; Waterfront of Antalaha > 5000 (half have disappeared due to a tidal wave in 2012); Tree nursery > 100,000; Experimental forest to create green charcoal > 25,000; Youth Center > 150; Eastern Cape > 500; Ambodikakazo > 200 and Manambato > 5000. This includes fruit trees, fast growing trees for charcoal, native hardwood trees, etc...
- School visits with local eco-guides, more than 400 students and young adults have visited from January 2014 to date, including 5 schools in the SAVA region, members of the local church, boy scouts and English environmental clubs such as GIDA, KEEN and EARS
- Provide work to the village women by buying handicrafts to sell at the MACOLLINE/CALA shop in the town of Antalaha
- Implemented a battery recycling program in the commune
- Participated in the UN World Tourism Day 2014
- Currently completing tree and herbaceous plant inventory in order to follow the evolution of nature in the protected Macolline reserve. Last inventory taken was in 2010
- Accepted in to the Sustainable Tourism Program of Madagascar in November 2014
- Listed on [Trip Advisor](#)
- Macolline has websites available in [French](#) and [English](#)

### School visits to Macolline in 2014-2015

<b>2014</b>			
<u>Date</u>	<u>School</u>	<u># of students</u>	<u># of teachers</u>
09-Jan	CURSA	62	2
03-May	St.Jean	18	1
21-May	Ezaka	36	3
06-Jul	GIDA	12	1
11-Jul	St.Jean	43	2
12-Jul	Ezaka	27	2

<b>2015</b>			
<u>Date</u>	<u>School</u>	<u># of students</u>	<u># of teachers</u>
01-Feb	Scouts Catholiques	32	6
07-Feb	Keen's Club	17	1
07-Mar	St Jean & Lycée	49	1
31-Mar	Lycée d'Andapa	12	2
01-Apr	Group Biblique Secondaire	65	2
18-Apr	Bambino	27	1



Rado works in development and teaching at Macolline. Here, he is explaining the different varieties of vanilla to elementary school students.

## ESTIMATED BUDGET (Cost per student)

According to our calculations, we need \$4 (12 000 Ariary) per entry, per student. This cost includes:

- Site maintenance  $33\,466\,800 + 7\,500\,000 + 5\,880\,000 + 97\,000 = 46\,943\,800$  Ariary
- Transport for groups of students to and from the site (petrol and drivers) 9 263 430 Ariary
- Teachers and local guides 34 800 000 Ariary
- Educational take-home booklets 15 000 000 Ariary
- Presentation of a documentary film to conclude the day's events 1 500 000 Ariary
- Regular monitoring using educational tools and video projector presentations to provide students with a follow up. Eco-guides will go to each school for ongoing awareness 3 700 000 Ariary
- Rent 3 800 000 Ariary
- Bank charges 200 000 Ariary

There are at least 30,000 students in the town of Antalaha. The goal is to educate 10,000 students per year over a 3 year period. **Our annual budget is 115 207 230 Ariary (approximately US\$38 500).**

Estimated yearly budget in Ariary	
Salaries (permanent and part time)	33,466,800
Property maintenance and repairs	7,500,000
Fringe benefits	5,880,000
Cnaps (social security)	97,000
Logistic expenses (petrol, drivers, maintenance, canoes)	9,263,430
Salaries of permanent environmental guides	34,800,000
Take-home educational booklets	15,000,000
Film documentary	1,500,000
Office expenses	3,700,000
Rent	3,800,000
Bank charges	200,000
	<b>115,207,230</b>



Donors in the US and CANADA are now able to make tax-deductible gifts to **CHARITIES AID FOUNDATION (CAF)** with **Macolline** as the grant recipient. Please use the link below to proceed.

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Madagascar is a victim of traditional agricultural practices like "tavy" (slash and burn) which has resulted in major deforestation all around the island. To remedy this situation, it is appropriate to sensitize the region's youth. Macolline strives for reforestation with native species grouping different endemic species, according to UNESCO conservation priorities. Tens of thousands of trees have been planted, including over 600 species of precious and semi-precious wood native trees, fruit trees and fast growing trees. Macolline has been participating for more than 12 years in the fight against deforestation in the Antalaha area. Precious woods sometimes take centuries to reach their maximum size, making the looting of highly threatened species highly unsustainable. Today it is illegal to chop down or to export these precious woods which include rosewood, palissandre, ebony etc.... Unfortunately, illegal logging is still one of the major environmental problems of our region. We fight against the disappearance of precious species by implementing forestry practices to create employment and a source of income while protecting the forest. Macolline also produces seeds to reforest these trees. Nearby Macolline, we have also developed new forests by planting fast growing species that will be used for "green coal". For example, a 25 year old forest has been planted with 4 waves of planting: In the first wave in 1992, 300 villagers began planting Filao trees on a total area of almost 40 acres.



Additional plantings were in 2008, 2009 and 2010. The objective, to meet the demand for coal, is to achieve reforestation continuity in order to avoid constant reduction of the natural forests of the region. 85% of households in the region use charcoal, and adaptable exotic tree species can fulfill the need for fuel. Filao (Casuarina equisetifolia) for example, is a fast growing tree, usually 1m-10m in 2 years. This a perfect green coal alternative which is a daily need of the population.

Since 2001, the goal of the APM has been reforestation of native species and to enhance the Malagasy environment. In addition to the traditional activities of the tourist park, the site aims to raise awareness about various Malagasy forest species such as medicinal plants. Underlying each component of the training program is a commitment to promote understanding of native plants and the role that they play in their ecosystems, as well as traditional knowledge and practices.



Currently, the site is visited by classes from primary schools to University level, and visits are followed by tree planting. We believe that students and teachers are the key to preserving the unique environment of Madagascar. The objective of the Interpretation Center at the entrance of Macolline is to host classes and students and provide awareness days for the protection of nature. Teachers will adapt their teaching approach to the various age groups, with as many local students visiting as possible. Our eco-guides have received MAD'ERE Kit training, Madagascar National Park training, and have completed GIDA courses (Independent Guides of Antalaha with diplomas), all of which play an important role in the education of Malagasy students at Macolline. Today, the association wants to expand its mission of natural biotope protection by creating awareness days for school groups.





The APM capacity building program includes counselling and continuous monitoring of students of all ages in the region of Antalaha using activities such as workshops and training programs related to conservation and reforestation. Macolline and its educators aim to increase the local awareness of individuals and communities to manage their natural resources. Our main objective is to become an environmental education resource center where teachers and students can enrich their botanical and environmental knowledge. We believe that combining this, with exposure to the actual work done in the tree nurseries, is a good approach to address environmental education.





*Macolline from above (photo by JCK)*

Macolline is a forest that serves as an awareness tool for the protection of biodiversity. Our education activities, programs and resources have been developed to provide an integrated approach to environmental education in the SAVA region. Conservation efforts are not sustainable unless undertaken in collaboration with educational initiatives. Youth awareness and involvement in the future of the planet, and in particular Madagascar, is the only way to meet the environmental challenge of the coming decades.

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