

OM

ORQUIDEAS MOXVIQUIL

Tonala 27 y

Periferico Norte #4

San Cristobal de las Casas, Chiapas Mexico

Un proyecto de PRONATURA SUR

ORQUIDEAS MOXVIQUIL OM Parque Botanico

HISTORY of the Jardin

The Jardín de Orquídeas Moxviquil was established in 1994 by Craig "Cisco" Dietz to rescue principally orchids, secondarily other epiphytes, (plants growing externally on a plant without parasitizing it...living in harmony with a host tree), that he witnessed decaying, being removed for illegal commercial sales, or destroyed by burning, dumping or abandonment due extensively to the extreme pressure placed on the natural environment by man's singular needs and nature's own demands. The damage inflicted on the environment by man are manifold; from the need for new milpas to supply food for his family, to new roads, electrical transmission lines, the need for charcoal as a fuel for cooking and heat and the ancient practice of slash and burn agriculture and out-of-control milpa fires all add up to thousands of hectares of virgin and second growth forest, savanna and selva being lost each year. These destroyed hectares coupled with natural causes; storms, accidents, and old age of trees all encourage the need to guard and encourage sustainable and profitable natural reserves in multiple locations throughout Chiapas that are suffering from server negative and destructive forest management.

The fact that there was no visible governmental body rescuing or stopping the destruction nor did it seem that there was interest to address the problem of forest habitat destruction and rescuing those plants displaced, lead Cisco to start the Jardín de Orquídeas in November of 1994. From this modest and humble idea and desire to guard and share with Mexico and the world some of Chiapas's natural resources the Jardin is attempting to push the boundaries of botanical gardens, forest management and a new profitable rescue and sale of flowers and to eventually reproduce selected orchids for commercial sales.

In 2000 Cisco was directed to team with PRONATURA Chiapas, the preeminent guardian of the natural wonders of Chiapas and Mexico, to establish the Jardín de Orquídeas Moxviquil, a museum and greenhouses to preserve and open the world of orchids to visitors and scientist alike. JOM also plans to open satellite jardins in various communities and to become the inspiration for locally based community jardins and to assist in their drive for education, the preservation of forest resources, and profitable forest management. PRONATURA has received official governmental approval, an UMA, to guard and continue the work the Jardin established. In July of 2007 the jardin formally changed it's official name to ORQUIDEAS MOXVIQUIL, OM.

GARDENS

OM will be located at the PRONATURA reserve, Moxviquil, which is located a ten-minute ride from the center historical of San Cristobal. Moxviquil is vital for the preservation of the remaining wild forests near San Cristobal. As one enters the Moxviquil site the presence of a gentler nature begins, the sights, scents and sounds will overtake the visitor. Walking away from the entrance area one will follow a path that crosses over a pond, home to local fish and natural water plants of the Chiapas highlands. The ponds principle function is to collect rain water from the Museum and greenhouse roofs and from a seasonal river and the existing Moxviquil structures, which will then be used to irrigate the orchids. The ponds irrigation waters will be benefited from the fish and natural vegetation as it decomposes. Entering the museum one will have opportunities to read orchid books, investigate the extensive online database that OM has assembled or enter directly to the jardin. Exiting the museum the trail leads to the five greenhouses and passes the plaques of distinguished donors.

The Jardins' museum, which will house photos, informational wall hangings, internet connections and a rotating display of orchids in flower and the surrounding greenhouse complex will be an integral part to the management plan of PRONATURA-Sur for the Moxviquil site.

The greenhouses will be able to house the jardin's different environments with ease and grace. The Jardín has rescued predominantly in five areas of Chiapas and it is these areas that will be represented by unique environments that mimic the orchids rescued locations. These ecosystems will be composed of trees, bromeliads, ferns, mosses and lichens living collectively with the orchids thus duplicating in our modest fashion the atmospheres of distinct Chiapas natural areas. As one enters each greenhouse ideally the sounds, smells and sensations of being in a distinctive locale/universe will give the visitor a transcendental experience. Orchids will be placed in natural settings, at eyelevel, mimicking the upper reaches of the forest, where most orchids live, which can be as high as 30 meters and thus out of reach of most visitors. Within the first greenhouse, for the tierra caliente, we will place chrysalises of butterflies from various areas so that the visitors will have a more natural environment filled with the flight and dance of these remarkably colorful members of a healthy ecosystem.

These exceptional created atmospheres will be seductions for the visitor to explore other areas of Chiapas especially the satellite gardens that will be established by the Jardín and PRONATURA Sur in sites purposely selected for their unique orchid habitats. One greenhouse will be an open air structure creating a copy of the different Altos environments in one compact area where orchids of Bazom, Huitepec and Santo Domingo from the high damp mist

shrouded mountain of the Sierra Madre de Chiapas. These orchids do not require the protection from the cold as orchids from lower elevations.

Surrounding the museum/greenhouses will be nature trails where various endemic plants will be placed in natural organic settings. A series of medicinal plants from Chamula and Zinacantan will be placed next to the trail with informational plaques giving the visitors a sample of the traditions of the original peoples in Jovel Valley. Orchids and other epiphytes will be placed on the trees as they mature, creating a living museum of growth and change. A demonstration garden for what can be done. The trail will climb the mountains to the north of Moxviquil giving the visitor ample chances to view orchids, ferns, bromeliads, a Maya site, MOXVIQUIL and stunning views of San Cristóbal with her colonial buildings nestled in the Jovel Valley.

Along the trail system OM will have a series of informative plaques that show the use of native plants by two indigenous communities in the Altos de Chiapas, Chamula and Zinacantan. These plaques will have the local, common and scientific names and their use as food, commercial and medicine. This vital information will help locals and visitors understand the value and traditional use of these local plants.

We are also in consultation to establish a fungus garden which will have constantly changing displays of the local fungus. This will be a colorful and varied in form as the fungus of the area is extensive but so often hidden.

COMMUNITIES

The Jardín will be working with several local communities to foster a sense of pride in the natural wonders that exist within their environments. We plan to encourage forest conservation by offering incentives to not cut trees unnecessarily. When cutting is essential we will propose and assist in replanting from existing nursery stock and that discarded epiphytes are guarded in a central greenhouse for nurturing and eventual sale of the flowers.

One Tzeltal speaking community, Amatenango de Vale is especially appropriate for this project. The communities' financial base, is farming and the selling of hand made pottery produced by the women of the community. Our idea for this community is to have the men, after cutting trees for the open air firing of the women's pottery, to rescue the discarded epiphytes and bring them to a central greenhouse where they will be graded and then set into platforms where they will begin to mature. The orchid that is most common in this area is *Oncidium leucochilum*, a highly endangered species that is common in the local forests living on old growth oaks. This flower is used during the festival of San Pedro and Semana Santa where it is cut and used as adornments in homes and the Catholic Church. The flowers have a distinct growth habit that produces a long inflorescence from 1 to 3 meters in length with up to 250

COLLECTION

As of July 2008, the collection has over 1800 rescued plants with 400 species. The collections data base has over 3800 entries of the epiphytes of Chiapas. This is an excellent beginning and one that must continue to grow and mature which will become the largest collection and database of Chiapas orchids open to all, from research botanist to students and to the curious and aficionados. Chiapas is the state with the richest biodiversity in all of Mexico and one of the most important on a world level. In Chiapas one may find over 700 species of orchids compared to 1200 for all of Mexico. The Jardín de Orquídeas has been successful in rescuing well over half of the positively identified orchids for Chiapas. Cisco has collected in various locations in Chiapas, from the Altos to the selva and many locations in between. The principal locations represented in the collection are, the Los Altos, Comitán Valley, Lagos de Montebello, Ocosingo, Laguna Mira Mar, Naha and to a smaller degree, the southern terminus of La Sierra Madre de Chiapas, the Rio Grijavla Valley and the selva negra. The collection has rescued several orchids that are near extinction in their natural areas and has many unusual and rare orchids all saved from destruction. All orchids rescued are vital for maintaining a database of the *living* bio-diversity of the orchids and to insure a vital multi dimensional use of these endangered plants.

PURPOSE

The idea for OM, in its simplest form, is to maintain for future generations a small sampling of the vast and varied lifeblood of Mexico's living natural wonders. To maintain an area where today and tomorrow people may visit and share in the beauty and wonder of these most graceful, fanciful and simply extraordinary handiworks of evolution. OM also proposes to be a location for the dispersal of vital information for future scientific studies, a location open to all people, from all walks of life and as a resource that will reach out to others to help form Orchid societies and satellite gardens and reserves in diverse areas in Chiapas and Mexico. The Jardines will also be an area bringing together like minded people to share the wonders of orchids, and all plant and animal life. Reaching further a field we will be a source, a springboard to encourage campesino groups to take control of the destiny of their wild lands by helping them preserve sections that are virgin and unexploited and to then help them establish nurseries to seed, grow and produce flowers and plants for the local and export markets. Finally as a clearing ground for new and existing information about the wonders of orchids, epiphytes and the natural beauty of Mexico and the world; an oasis surrounded by the natural beauty of Chiapas.

medium sized flowers, 3cm/3cm, with a delightful fragrance. Under normal conditions, the cut flowers can last for one month thus making this an ideal flower for national and international cut flower markets. As the orchid flower begins to gain a vibrant and demanding market share other orchids and tillandsias can be introduced bringing a diversified and much needed financial independence to the community.

OM and PRONATURA SUR will be able to offer training and expert guidance for the community to start the project. We will encourage the community to reinvest profits into education for children and greater forest preservation. Once the forests are maintained and guarded, tourism, hiking, and orchid tours can greatly enhance the financial well being and pride of the people of Amatenango de Vale.

FUTURE

OM and PRONATURA-Sur propose to establish a vital supportive life force in the area of forest management with the ORCHID as the symbol of all that is natural, beautiful, profitable and in need of protection and preservation. The future for OM is open, will be ever changing but with the overriding purpose to PROTECT the existing wild areas of Chiapas, to DISPERSE INFORMATION about ORCHIDS and epiphytes, to ENCOURAGE PRESERVATION of existing forest, to implement SUSTAINABLE FOREST PRACTICES and to OPEN ADDITIONAL AVENUES OF FINANCIAL INDEPENDENCE for communities using the orchid flower sales as an investment for the future of the communities education, reforestation and guardianship of their remaining natural lands all with the ORCHID as a symbol, as a beacon to help motivate us to accept a new dawn of preservation and respect for the natural wonders of Chiapas.

Cisco Dietz
Director
Orquideas Moxviquil
2008

Orquídeas en Chiapas

Desaparecen orquídeas en Chiapas.

14/01/2008 Las causas directas de su desaparición son la destrucción de los bosques, el saqueo ilegal de las reservas naturales y falta de políticas de conservación.

Las causas directas son la destrucción de los bosques, el saqueo ilegal de las reservas naturales y falta de políticas de conservación, están acabando con las orquídeas en el estado mexicano de Chiapas.

En Chiapas (México), muchas especies de orquídeas han desaparecido y están desapareciendo a un ritmo frenético. En principio, se cree que por causa directa de la destrucción de los bosques, el saqueo ilegal de las reservas naturales y la falta de políticas activas de conservación, según señala Cisco Dietz, estudioso de la zona.

Según Cisco, el saqueo se registra principalmente en la Selva Lacandona y en reservas como Lagos de Montebello, Montes Azules y El Huitepec. Según el investigador, una parte de este saqueo se vende en las calles o es transportado a otros estados del país para su comercio ilegal. El estudioso cree que la mayoría de estas flores son extraídas ilegalmente y mueren por su incapacidad para adaptarse a otros territorios o clima.

Como bien señala Cisco “estas flores sacadas de los Lagos de Montebello llegan a otra ciudad, son ofrecidas a la gente en el centro por unos cuantos pesos, pero casi de inmediato mueren pues los ecosistemas son totalmente diferentes”. Además, explica que estas plantas se reproducen en árboles, troncos, piedras, rocas y en la tierra y, por ello, deben contar con agua necesaria y la temperatura ideal para poder sobrevivir ya que no lo hacen en cualquier ecosistema.

Dietz, ecologista y fotógrafo, cuenta con un orquideario en el que hay 450 especies de plantas que él mismo rescató o fue sembrando. Aclara que cuenta con los permisos de las autoridades competentes para instalar el orquideario en su casa, en donde además las plantas están clasificadas para contar con información. Señala que existen especies endémicas de orquídeas en el cerro El Huitepec y sus inmediaciones.

Para apoyar el trabajo de Cisco, la organización civil Pronatura Chiapas y Dietz están construyendo un orquideario en el periférico norte de San Cristóbal de Las Casas, concretamente en un predio cercano al cerro del Huitepec, donde las condiciones de conservación son mucho mejores.

LAL/AGENCIAS

México, D. F., a 17 de septiembre de 2008.

SEMARNAT
Presente.

Por este conducto manifestamos nuestro apoyo a las actividades de colecta, cultivo y propagación del proyecto de la UMA de Orquídeas Moxviquil, a quienes desde sus inicios hemos colaborado directamente en la identificación de especies a través de imágenes digitales así como con la recepción de ejemplares de herbario que han sido depositados en esta institución y ocasionalmente de alguna planta viva.

Pese al conocimiento general que se tiene de las orquídeas de México, se siguen descubriendo nuevas especies para la ciencia en localidades de las cuales no había registro previo.

Se extiende la presente carta para los fines que Orquídeas Moxviquil considere necesarios.

Atentamente.

ING. ERIC HÁGSATER
Director Herbario AMO

PRONATURA SUR Cisco Dietz

Description
EXPENSES and BALANCE 5/2008 to 11/2008

Starting Balance \$211,050.00

| Column1 | Column2 | Column3 | Column4 | Column5 | Column6 | Column7 |
|-----------|---|---------|---------|----------|-------------|--------------|
| Date | Item Description | | | Received | Payment | Balance |
| 5/5/2008 | saldos for two weeks | | | | \$7,930.00 | \$203,120.00 |
| 5/5/2008 | material misc malla and flowers for dia de trabajadores | | | | \$148.00 | \$202,972.00 |
| 5/5/2008 | material from altos fac 77909 fac 78055 | | | | \$6,853.19 | \$196,118.81 |
| 5/5/2008 | arena | | | | \$1,380.00 | \$194,738.81 |
| 5/9/2008 | color tints | | | | \$64.00 | \$194,674.81 |
| 5/9/2008 | Estefeta for transport to AMO herbarium | | | | \$181.30 | \$194,493.51 |
| 5/10/2008 | Color tints | | | | \$90.00 | \$194,403.51 |
| 5/10/2008 | material altos FAC 78322 | | | | \$2,044.00 | \$192,359.51 |
| 5/14/2008 | botes | | | | \$50.00 | \$192,309.51 |
| 5/14/2008 | Grava lower quality | | | | \$287.50 | \$192,022.01 |
| 5/14/2008 | Grava high quality | | | | \$690.00 | \$191,332.01 |
| 5/14/2008 | tire y camera y ponche | | | | \$150.00 | \$191,182.01 |
| 5/14/2008 | shipping to eric | | | | \$181.30 | \$191,000.71 |
| 5/14/2008 | albono de monte | | | | \$90.00 | \$190,910.71 |
| 5/14/2008 | material Abastos plastic greenhouse tallier cable Factura 06848 | | | | \$362.40 | \$190,548.31 |
| 5/22/2008 | saldos for one week | | | | \$3,960.00 | \$186,588.31 |
| 5/22/2008 | Taxi | | | | \$144.00 | \$186,444.31 |
| 5/22/2008 | Piedras | | | | \$690.00 | \$185,754.31 |
| 5/22/2008 | 4 litros de aceite | | | | \$80.00 | \$185,674.31 |
| 5/22/2008 | 2 Cepillos | | | | \$38.49 | \$185,635.82 |
| 5/22/2008 | Camara plus cambio | | | | \$55.00 | \$185,580.82 |
| 5/22/2008 | Alambre de amara | | | | \$40.00 | \$185,540.82 |
| 5/22/2008 | plastico para invernadero | | | | \$160.00 | \$185,380.82 |
| 5/22/2008 | material altos FAC 78428 | | | | \$771.82 | \$184,609.00 |
| 5/14/2008 | Trajabadores | | | | \$4,740.00 | \$179,869.00 |
| 5/14/2008 | Taxi | | | | \$36.00 | \$179,833.00 |
| 5/31/2008 | Workers mayo 31 | | | | \$3,860.00 | \$175,973.00 |
| 5/31/2008 | taxi | | | | \$72.00 | \$175,901.00 |
| 5/31/2008 | arena grava piedras | | | | \$1,725.00 | \$174,176.00 |
| 5/31/2008 | Paints | | | | \$158.76 | \$174,017.24 |
| 5/31/2008 | repair greenhouse | | | | \$320.00 | \$173,697.24 |
| 5/31/2008 | copia llave | | | | \$10.00 | \$173,687.24 |
| 5/31/2008 | tintas para empresora | | | | \$225.00 | \$173,462.24 |
| 5/31/2008 | error en calculacion arena semana pasada | | | | \$107.50 | \$173,354.74 |
| 5/31/2008 | ALTOS material Factura 78898 | | | | \$960.00 | \$172,394.74 |
| 6/7/2008 | Workers 7 june | | | | \$4,740.00 | \$167,654.74 |
| 6/7/2008 | materials | | | | \$527.02 | \$167,127.72 |
| 6/7/2008 | Workers 14 june | | | | \$3,210.00 | \$163,917.72 |
| 6/7/2008 | materials | | | | \$1,612.00 | \$162,305.72 |
| 6/7/2008 | PERMISSION TO CUT TREES in MOX | | | | \$1,200.00 | \$161,105.72 |
| 6/17/2008 | Workers 21 June | | | | \$5,040.00 | \$156,065.72 |
| 6/17/2008 | Materials | | | | \$3,204.00 | \$152,861.72 |
| 6/17/2008 | Icon design | | | | \$1,000.00 | \$151,861.72 |
| 6/23/2008 | metal | | | | \$22,682.50 | \$129,179.22 |
| 6/23/2008 | malla de sombra | | | | \$4,500.00 | \$124,679.22 |
| 6/23/2008 | ventalacion | | | | \$5,004.80 | \$119,674.42 |
| 6/23/2008 | TAGS | | | | \$2,100.00 | \$117,574.42 |
| 6/28/2008 | Weekly expenses | | | | \$6,227.00 | \$111,347.42 |
| 7/5/2008 | Weekly expenses | | | | \$1,570.00 | \$109,777.42 |
| 7/12/2008 | Weekly expenses | | | | \$5,648.00 | \$104,129.42 |
| 7/19/2008 | Weekly expenses | | | | \$3,512.00 | \$100,617.42 |

**ORQUIDEAS MOXVIQUIL
PRONTURA-SUR**

Cisco Dietz Director

Budget

| | To complete first greenhouse | Costs to date PAID | Project Completion | Total Costs |
|--|------------------------------|--------------------|--------------------|-----------------------|
| Phase 1 Greenhouse CONSTRUCTION | \$334,656.00 | \$341,220.00 | \$3,534,756.00 | \$3,875,976.00 |

| Name | Description | WEEKS | Cost Each | | Total |
|---|-------------|-------|------------|-----------|---------------------|
| Mano de obra | | | | | |
| Maestro | weekly pay | 16 | \$1,500.00 | | \$24,000.00 |
| abienls | weekly pay | 16 | \$1,100.00 | 3 workers | \$52,800.00 |
| labors | weekly pay | 16 | \$660.00 | 7 workers | \$73,920.00 |
| Various day laborers | | | | | \$7,000.00 |
| Federico architect | | | | | \$45,000.00 |
| Total Mano de obra | | | | | \$202,720.00 |
| Materials | | | | | |
| Concrete | | | | | \$22,000.00 |
| Sand grava | | | | | \$16,000.00 |
| Steel | | | | | \$34,000.00 |
| Conventec | | | | | \$15,000.00 |
| Misc | | | | | \$34,000.00 |
| Total Materials | | | | | \$121,000.00 |
| Other Projects | | | | | |
| Pond | excavation | | | | \$15,500.00 |
| | | | | | \$0.00 |
| Total Other Projects | | | | | \$15,500.00 |
| Cutting LARGE trees | | | | | |
| Lenaterro | | | | | \$2,000.00 |
| Total Cutting Large Trees | | | | | \$2,000.00 |
| TOTAL PAID FOR FIRST PHASE | | | | | \$341,220.00 |
| TO COMPLETE PROJECT PRICES BELOW first phase and total obra. | | | | | |
| Benches in HOT HOUSE | | | | | |
| Connecting Entrance | | | | 1 | \$2,000.00 |
| Metal and wood in Greenhouse | | | | 3 | \$6,000.00 |
| Total Benches | | | | | \$8,000.00 |
| Lamina for greenhouse HOT HOUSE | | | | | |
| Material roof | | | | | \$70,000.00 |
| Labor | | | | | \$25,000.00 |
| Material East end | | | | | \$20,000.00 |
| Material Top and side windows | | | | | \$11,000.00 |
| Material Door and Windows | | | | | \$10,000.00 |
| Total Lamina | | | | | \$136,000.00 |
| Electricity for greenhouse HOT HOUSE and to bring from Transformer | | | | | |
| material | | | | | \$53,000.00 |
| labor | | | | | \$6,600.00 |
| Total Electricity | | | | | \$59,600.00 |
| Installing of orchids for HOT HOUSE Two months | | | | | |
| Material | | | | | \$10,000.00 |

ORQUIDEAS MOXVIQUIL
PRONTURA-SUR

Cisco Dietz Director

Budget

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|--|------------------------------|--------------------|--------------------|----------------|
| Phase 1 Greenhouse CONSTRUCTION | \$334,656.00 | \$341,220.00 | \$3,534,756.00 | \$3,875,976.00 |

| Name | Description | WEEKS | Cost Each | Total |
|---------------------------|-------------|-------|-----------|-------------|
| labor | | | | \$5,000.00 |
| Shade material | | | | \$6,000.00 |
| Ventilators | | | | \$3,500.00 |
| Rocks | | | | \$2,000.00 |
| Total Installation | | | | \$26,500.00 |

| Metallic support structure and concrete bases | | | | |
|--|--|--|--|-------------|
| Metal columns and concrete bases and labor | | | | \$24,056.00 |
| Arched metal connectors and labor | | | | \$14,000.00 |
| Finishing of concrete bases to look like tree trunks | | | | \$3,500.00 |
| Total Metal and concrete support | | | | \$41,556.00 |

| Landscape | | | | |
|---|------------------|---------|--|-------------|
| Cutting of trees | Pronatura people | 3 days | | PRO |
| Planting oaks | Pronatura people | 5 days | | PRO |
| General Cleaning | Pronatura people | 10 days | | PRO |
| Trails, rocks and details for garden | | | | \$18,000.00 |
| Cutting of large trees | | 1days | | \$1,500.00 |
| Pump for water, connections and plumber | | | | \$12,000.00 |
| Total Landscape | | | | \$31,500.00 |

| | | | | |
|---|--|--|--|--------------|
| Total TO COMPLETE FIRST PHASE PART TWO | | | | \$334,656.00 |
|---|--|--|--|--------------|

| Herbicides/Pesticides ORGANIC | | | | |
|--------------------------------------|--|--|--|------------|
| Neem | | | | \$2,000.00 |
| Hand Pumps | | | | \$600.00 |
| Total Herbicides/Pesticides | | | | \$2,600.00 |

| Fencing | | | | |
|----------------------|------------------|--------|--|--------|
| Planting of trees | Pronatura people | 5 days | | PRO |
| Posts | Pronatura people | 5 days | | PRO |
| Total Fencing | | | | \$0.00 |

| Parking for Jardin | | | | |
|-----------------------------|--|--|--|-------------|
| Rocks gravel sand & grading | | | | \$34,000.00 |
| Total Parking | | | | \$34,000.00 |

| Kids Park | | | | |
|------------------------|--|--|--|--------------|
| Landscaping and games | | | | \$124,000.00 |
| Total Kids Park | | | | \$124,000.00 |

| Publicity | | | | |
|--|--|--|--|-------------|
| Brochure and design printing of brochure | | | | \$30,000.00 |
| Stationary paper products | | | | \$3,000.00 |
| Total Publicity | | | | \$33,000.00 |

| NEW GREENHOUSES ARTIFICAL FOREST | | | | |
|---|--------------|--|--|--|
| ARTIFICAL FOREST | 15X10 meters | | | |

ORQUIDEAS MOXVIQUIL

PRONTURA-SUR

Cisco Dietz Director

Budget

Phase 1 Greenhouse CONSTRUCTION

| To complete first greenhouse | Costs to date PAID | Project Completion | Total Costs |
|------------------------------|--------------------|--------------------|----------------|
| \$334,656.00 | \$341,220.00 | \$3,534,756.00 | \$3,875,976.00 |

| Name | Description | WEEKS | Cost Each | Total |
|--|---|-------|-----------|----------------|
| ARTIFICIAL FOREST | Metal structure & labor | | | \$56,000.00 |
| ARTIFICIAL FOREST | Tables, benches and trails | | | \$35,000.00 |
| ARTIFICIAL FOREST | Foundation and labor | | | \$24,500.00 |
| ARTIFICIAL FOREST | Installation of orchids, shade cloth, ventilation, rock and metal | | | \$22,000.00 |
| SMALL Cold house | Architectual fees | | | \$10,000.00 |
| Total ARTIFICIAL FOREST | | | | \$147,500.00 |
| NEW GREENHOUSES Medium | | | | |
| Warm Lagos | | | | |
| MEDIUM LAGOS de Montebello | 15X10 meters | | | |
| MEDIUM LAGOS de Montebello | Metal structure & labor | | | \$86,000.00 |
| MEDIUM LAGOS de Montebello | Doors, Lamina, electrical | | | \$70,000.00 |
| MEDIUM LAGOS de Montebello | Foundation and labor | | | \$50,000.00 |
| MEDIUM LAGOS de Montebello | Installation of orchids, shade cloth, ventilation, rock and metal | | | \$22,000.00 |
| MEDIUM LAGOS de Montebello | Architectual fees | | | \$26,000.00 |
| Total MEDIUM LAGOS HOUSE | | | | \$254,000.00 |
| MEDIUM WARM house | 15X10 meters | | | |
| MEDIUM WARM house | Metal structure & labor | | | \$86,000.00 |
| MEDIUM WARM house | Doors, Lamina, electrical | | | \$70,000.00 |
| MEDIUM WARM house | Foundation and labor | | | \$50,000.00 |
| MEDIUM WARM house | Installation of orchids, shade cloth, ventilation, rock and metal | | | \$22,000.00 |
| MEDIUM WARM house | Architectual fees | | | \$26,000.00 |
| Total MEDIUM WARM | | | | \$254,000.00 |
| LARGE Hot house | 20X10meters | | | |
| LARGE Hot house | Metal structure & labor | | | \$110,000.00 |
| LARGE Hot house | Doors, Lamina, electrical | | | \$180,000.00 |
| LARGE Hot house | Foundation and labor | | | \$90,000.00 |
| LARGE Hot house | Installation of orchids, shade cloth, ventilation, rock and metal | | | \$30,000.00 |
| LARGE Hot house | Architectual fees | | | \$30,000.00 |
| Total HOT HOUSE | | | | \$440,000.00 |
| Total NUEVO GREENHOUSES | | | | \$1,095,500.00 |
| LANDSCAPING | | | | |
| Labor | Pronatura people | | | \$20,000.00 |
| Trees, shrubs, aquatic plants, ferns, rocks, sand, grava and | | | | \$75,000.00 |
| Total LANDSCAPING | | | | \$95,000.00 |
| MUSEO | | | | |
| MUSEO and all equipment | | | | \$1,100,000.00 |
| Total MUSEO | | | | \$1,100,000.00 |
| LAGUNA includes POND liner, pumps, fountain and filters | | | | |
| Laguna | | | | \$120,000.00 |
| Total LAGUNA | | | | \$120,000.00 |
| SIGNS | | | | |

**ORQUIDEAS MOXVIQUIL
PRONTURA-SUR**

Cisco Dietz Director

Budget

| | | To complete first greenhouse | Costs to date PAID | Project Completion | Total Costs |
|---|-------------|------------------------------|---------------------------------|--|----------------|
| Phase 1 Greenhouse CONSTRUCTION | | \$334,656.00 | \$341,220.00 | \$3,534,756.00 | \$3,875,976.00 |
| Name | Description | WEEKS | Cost Each | | Total |
| Signs | | | | | \$10,000.00 |
| Total SIGNS | | | | | \$10,000.00 |
| PATHWAYS BENCHES ILLUMINATION | | | | | |
| Benches in greenhouses | | | | 9 in new greenhouses | \$18,000.00 |
| Pathway connecting greenhouses | | | | | \$35,000.00 |
| Benches and tables outside greenhouses | | | | 15 benches five tables | \$40,000.00 |
| Lighting | | | | | \$14,000.00 |
| Total PATHWAYS BENCHES | | | | | \$107,000.00 |
| EDUCATION OUTREACH | | | | | |
| Contacts, tours, materials, on call staff, established for three years | | | | | \$300,000.00 |
| Total EDUCATION OUTREACH | | | | | \$300,000.00 |
| COMMUNITY OUTREACH | | | | | |
| Assist communities with orchid preservation and greenhouse and trail construction | | | | Ametenango de Vale \$35000 first year \$15000 for four years | \$95,000.00 |
| Total COMMUNITY OUTREACH | | | | | \$95,000.00 |
| WORKSHOP | | | | | |
| Workshop all materials | | | | | \$22,000.00 |
| Tools | | | | | \$10,000.00 |
| Total WORKSHOP | | | | | \$32,000.00 |
| ELECTRICITY outside of greenhouses | | | | | |
| Mano de obra | | | | | \$8,000.00 |
| Material | | | | | \$22,000.00 |
| Total ELECTRICITY | | | | | \$30,000.00 |
| | | To complete first greenhouse | Construction to date Costs PAID | Project Completion | Total Costs |
| ORQUIDEAS MOXVIQUIL PRONATURA-SUR | | \$334,656.00 | \$341,220.00 | \$3,534,756.00 | \$3,875,976.00 |

INFORME DE ACTIVIDADES

**RESCATE DE PLANTAS EPÍFITAS
AFECTADAS POR ACTIVIDADES
ANTROPOGÉNICAS EN LOS BOSQUES
DE CHIAPAS:**

**Área de Protección de
Flora y Fauna Nahá**

Craig Robert Dietz (“Cisco”)
Coordinador del Jardín de Orquídeas Moxviquil
Subdirección de Conservación
PRONATURA SUR

Marzo 2008



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Maxillaria elatior

Resumen

En este informe se documenta el rescate de epífitas realizado en el área natural protegida Área de Protección de Flora y Fauna Nahá, desarrollado en el periodo del 22 al 25 de Noviembre de 2007. El proceso de rescate fue exitoso, se contó con el apoyo de dos guardaparques del área protegida, así como de las autoridades locales de la comunidad. También se contó con la asistencia técnica de Jesica Ramírez, quien ayudó con la colecta, la toma de fotos y el llenado de los formatos. El material rescatado ha sido agregado a la colección del Jardín de Orquídeas Moxviquill (JOM), UMA no. 0358907. Con el rescate realizado se logró un avance favorable en la comprensión sobre las orquídeas y epífitas de Nahá.

Introducción

El rescate de epífitas que están siendo afectadas por actividades antropogénicas dentro de áreas protegidas del Estado de Chiapas, fue autorizado por la Dirección General de Vida Silvestre, SEMARNAT como parte de las actividades de rescate y conservación de la UMA 0358907 Jardín de Orquídeas Moxviquil, según Oficio Num. SGPA/DGVS/03859/07 con fecha 2 de Julio de 2007.

Las actividades realizadas en el Área de Protección de Flora y Fauna Nahá que aquí se reportan forman parte del Plan de Trabajo que Pronatura dio a conocer a la Comisión Nacional de Áreas Naturales Protegidas, Región Frontera Sur, Istmo y Pacífico Sur para el periodo Junio 2007 – Junio 2008 (se anexa dicho Plan de trabajo).

El responsable de la colecta de ejemplares durante el rescate es Craig Robert Dietz, coordinador del Jardín de Orquídeas Moxviquil de PRONATURA SUR. El propósito central fue agregar las especies rescatadas a la colección científica del JOM basada en San Cristóbal de las Casas, Chiapas; y con esto ampliar el conocimiento de la población de orquídeas de esta área protegida y en general de la región fronteriza o Selva Lacandona. Rescatamos orquídeas en seis diferentes áreas en los límites de Nahá, todos cerca de la comunidad del mismo nombre. La mayoría de los sitios de rescate estaban a 20 metros del camino de grava. Solamente un árbol caído se encontró a una distancia más profunda en el bosque. Todos los árboles sobre los cuales estaban los ejemplares rescatados estaban cortados excepto dos, que se trataron más bien de ramas caídas y no de árboles enteros. En ningún caso se colectaron epífitas de árboles vivos. Entre los principales resultados alcanzados se logró incluir a una nueva especie a la base de datos del JOM.

Metas

La meta principal de la actividad desarrollada fue rescatar ejemplares de epífitas de vida silvestre que de otra forma estarían destinadas a desaparecer por efectos antropogénicos tales como apertura de caminos, derribo de arbolado y/o otras acciones que alteran su hábitat. Así también ampliar la colección científica de ejemplares de epífitas del Jardín de Orquídeas Moxviquil, y documentar la diversidad de epífitas del Áreas de Protección de Flora y Fauna Nahá.

La información obtenida enriquecerá así mismo los listados florísticos para el área protegida, así como actualizar el listado que aparece en el “PROGRAMA DE CONSERVACIÓN Y MANEJO ÁREA DE PROTECCIÓN DE FLORA Y FAUNA NAHA”.

Objetivos específicos

Objetivo 1. Rescatar epífitas del Área de Protección de Flora y Fauna Nahá.

Objetivo 2. Incrementar el entendimiento sobre las epífitas del APFyF Nahá.

Objetivo 3. Presentar información científica a SEMARNAT, CONANP y PRONATURA sobre los ejemplares rescatados, la cual puede ser distribuida a otros para compartir el conocimiento adquirido.

Objetivo 4. Proveer de información actualizada a CONANP en relación a las epífitas del APFyF Nahá, para su inclusión en el "PROGRAMA DE CONSERVACIÓN Y MANEJO ÁREA DE PROTECCIÓN DE FLORA Y FAUNA NAHA".

Procedimiento / Alcance de trabajo

Después de informar previamente a CONANP Regional y al Director de Nahá sobre la visita al ANP para el rescate de epífitas, nos presentamos a la comunidad el jueves 22 de noviembre de 2007. Al llegar a la comunidad establecimos comunicación con los guardaparques del APFyF Nahá, así como con las autoridades locales (Comisariado Ejidal y Secretario Ejidal), a quienes se les informó de los propósitos del rescate, el destino y uso que tendrían los ejemplares rescatados, y se les mostró y proporcionó copia del permiso de investigación expedido por Semarnat, el cual ampara la realización de dichas actividades.

Adicionalmente, aunque no estuvo planificado previamente, se tuvo la excelente oportunidad de contar la presencia de personal de PROFEPA en el área, a quien igualmente se le informó de las actividades y se les entregó copia del permiso de investigación. Profepa confirmó y avaló la legalidad de la actividad, por lo que procedimos con la anuencia de todos estos actores institucionales, siendo acompañados en campo por dos guardaparques del APFyF Nahá.

El procedimiento siguiente fue iniciar el rescate al día siguiente por la mañana, explorando las áreas y a su vez recolectando orquídeas y otras epífitas. Tomamos fotos de los árboles caídos, establecimos coordenadas con un GPS y llenamos las fichas de colecta con los datos solicitados. Las orquídeas rescatadas fueron puestas dentro de bolsas con su número de identificación y localización, para poder ser colocadas correctamente en San Cristóbal. Una vez en San Cristóbal, identificamos cada planta y empezamos el proceso de montaje sobre el sustrato adecuado. Las orquídeas fueron puestas en los invernaderos donde la temperatura y la humedad puedan ser controladas, de acuerdo a sus necesidades específicas, según los requerimientos de cada especie.

Sitios visitados, materiales colectados y documentación fotográfica

En esta sección se presentan las coordenadas de colecta tomadas con GPS, elevación en metros sobre el nivel del mar, datos generales del hábitat, el material que fue rescatado y cualquier documentación fotográfica que se haya realizado durante el rescate. En aquellos casos en que fue posible identificar la especie, se detalla esta información. Caso contrario se indica como "sp" (sin especie identificada).

PRIMER SITIO DE RESCATE

| Ficha Colecta Jardín de Orquídeas Moxviquil, Pronatura Sur | | | | | |
|--|----------------------|----------------------------|----------------------|---|---------------------|
| Nombre del colector Craig Dietz "Cisco" | | Fecha 23 11 2007 | | Localidad Nahá, Mpio. Ocosingo | |
| Temperatura 25°C | | Humedad media | | Exposición Al lado del camino, en área abierta | |
| | | | | Coordenadas X 16 59 180 Y 91 34 977 | |
| | | | | Altitud 885 msnm | |
| Perturbación presente en el sitio | | | | | |
| Corta Árboles | Apertura por cultivo | Apertura por ganadería | Incendio | Apertura por electricidad XXXX | Apertura carretera |
| Tipo de vegetación | | | | | |
| Bosque | Selva XXXX | Bosque de niebla | Pastizal | Acahual | Otro (especificar): |
| Forma de crecimiento | | | | | |
| Epífita XXXX | Litofita | Terrestre | Condición de plantas | | |
| Observaciones | | | | | |
| Este árbol, WAYTE CHAKIA en idioma Maya, fue cortado por la Comisión Federal de Electricidad (CFE) para el proyecto de líneas eléctricas. Había muchas epífitas todavía en buenas condiciones para ser rescatadas. | | | | | |



Árbol Wayte Chakia, cortado a lo largo de la carretera

Este rescate fue sobre la carretera principal, al oriente de los límites de la reserva. El árbol fue cortado probablemente cinco o seis meses antes de nuestra llegada. El árbol estaba a la orilla de la carretera.

EPIFITAS RESCATADAS:

- a) **ORQUIDÁCEA:** Coelia bella, Dichaea sp., Dinema polybulbon, Elleanthus cynarocephalus, Elleanthus graminifolius, Encyclia sp., Epidendrum sp, Lockhartia sp., Lycaste sp., Maxillaria elatior, Maxillaria meleagris, Maxillaria variabilis, Scaphyglottis sp.,
- b) **BROMELIÁCEA:** Tillandsia sp., Tillandsia sp., Tillandsia sp. (3 ejemplares del mismo género)
- c) **PTERIDOPHYTA:** sp., sp., sp., sp. (4 ejemplares sin identificación conocida)
- d) **ARACEAE:** sp.

SEGUNDO SITIO DE RESCATE

| Ficha Colecta Jardín de Orquídeas Moxviquil Pronatura SUR A.C. | | | | | |
|---|----------------------|----------------------------|----------------------|---|---------------------|
| Nombre del colector Craig Dietz "Cisco" | | Fecha 23 11 2007 | | Localidad Nahá, Mpio. Ocosingo | |
| Temperatura 27 °C | | Humedad media | | Exposición Al lado del camino, en área abierta | |
| Coordenadas X 16 58 038 Y 91 34 661 | | | | | |
| Altitud 957msnm | | | | | |
| Perturbación presente en el sitio | | | | | |
| Corta Árboles | Apertura por cultivo | Apertura por ganadería | Incendio | Apertura por electricidad xxxx | Apertura carretera |
| Tipo de vegetación | | | | | |
| Bosque | Selva xxxx | Bosque de niebla | Pastizal | Acahual | Otro (especificar): |
| Forma de crecimiento | | | | | |
| Epifita xxxx | Litofita | Terrestre | Condición de plantas | | |
| Observaciones | | | | | |
| Este árbol, WAYTE CHAKIA en Maya fue cortado por CFE para el proyecto de líneas eléctricas. Había muchas excelentes matas de Orquídeas en buenas condiciones. | | | | | |

Este rescate fue en la carretera principal al oriente, en los límites de la reserva. El árbol fue cortado aproximadamente cinco o seis meses antes de nuestra llegada por la CFE para el proyecto de líneas eléctricas. El árbol estaba a la orilla de la carretera.

EPIFITAS RESCATADAS:

- e) **ORQUIDÁCEA:** Lepanthes sp, Lockhartia sp., Maxillaria aciantha, Maxillaria uncata, Platystele sp., Restrepia muscifera, Stelis sp.
- f) **BROMELIÁCEA:** Tillandsia sp., Tillandsia sp., Tillandsia sp.,
- g) **PTERIDOPHYTA:** sp., sp., sp.,

EL DONATIVO NIVELA Y RECOMPENSA ORQUIDEAS MOXVIQUIL OM

\$2.500.000 pesos NOMBRE sobre el PROYECTO de ORQUIDEAS MOXVIQUIL será la opción de este donador de decidir, liberta la entrada para la familia al jardin, 75% descuento en libros y joyas, invita a acontecimientos especiales.

\$1.500.000 pesos NOMBRE de del museo será la opción de este donador de decidir, liberta la entrada para la familia al jardin, 50% descuento en libros y joyas, invita a acontecimientos especiales.

\$500.000 pesos NOMBRE en uno de los cinco invernaderos será la opción de este donador de decidir, liberta la entrada para la familia, 25% descuento en libros, las joyas, invitan a acontecimientos.

\$499.000 a 150.000 pesos varios NOMBRES en invernaderos, hasta tres, liberta la entrada para la familia, 20% descuento en libros, las joyas, invitan a acontecimientos.

\$200.000 pesos su nombre en bosque de Altos, liberta la entrada para la familia, 15% descuento en libros, las joyas, invitan a acontecimientos.

\$99.000 a 4.000 pesos nombres en varios jardins pequino: helechos, hongos, lugares para descansar y bancos en la entrada, los senderos y adentro los invernaderos, liberta la entrada para la familia, 10% descuento en libros, las joyas, invitan a acontecimientos.

\$1.000 pesos nombre en un mosaico flor de orquídea, 25/25cms hecho a mano en los senderos del proyecto de jardin.

\$500 pesos nombre en un mosaico flor de orquídea, 12/12cms hecho a mano en los senderos del proyecto de jardin.

ORQUIDEAS MOXVIQUIL



SENDERO

Invernadero Lagunas de Montebello

INVERNADERO

INVERNADEDRO Caliente

PARQUE PARA NIÑOS

Humadales

Laguna

BOSQUE los ALTOS

TALIER

MUSEO

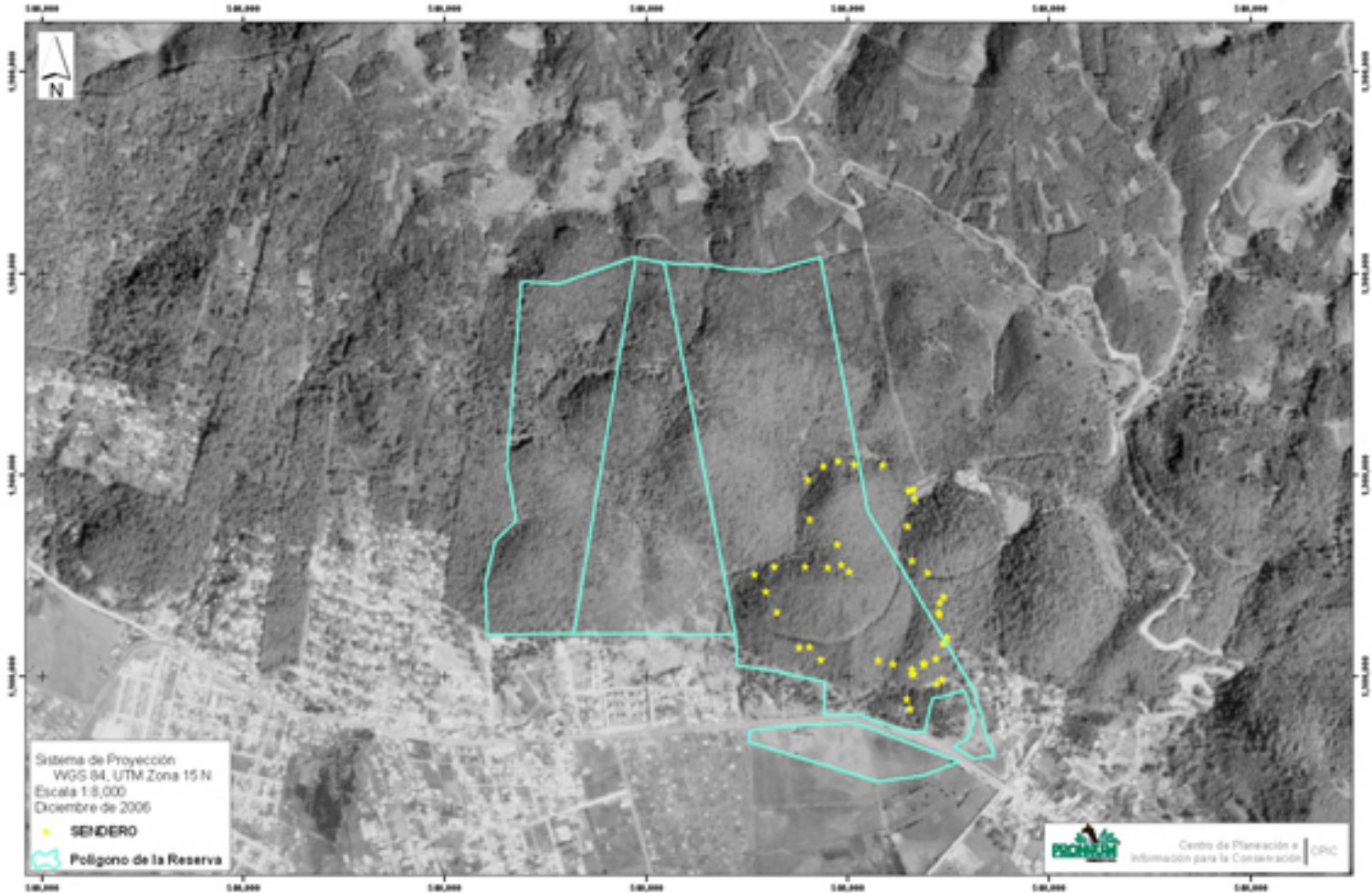
INVERNADEDRO Caliente

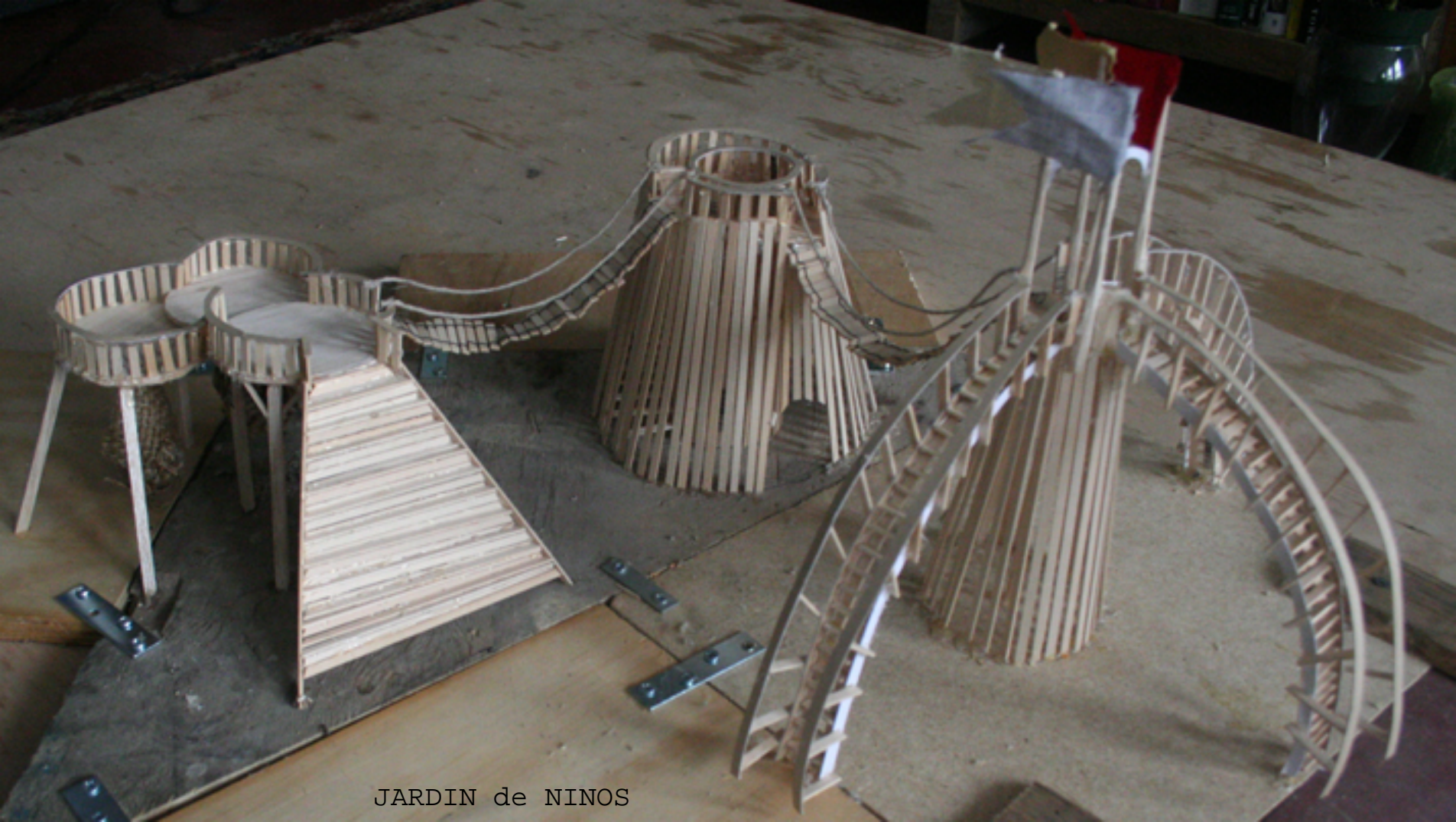
ENTRADA

ESTACIONAMIENTO

PEREFERICO NORTE

F. BURKHA





JARDIN de NINOS

ORQUIDEAS MOXVIQUIL
PRONTURA-SUR



FOTOS DE COLECCION ORQUIDEAS MOXVIQUIL

ORQUIDEAS MOXVIQUIL
PRONTURA-SUR



FOTOS de JARDIN de ORQUIDEAS MOXVIQUIL



We at OM would like to thank you for looking at our proposal; we feel strongly that OM has a organization that will help many in a myriad of ways. From the sublime tranquility of a primordial forest, to the hectic world of a prosperous city, to the deprivations of a shanty town we at OM will open the mind set of many, by giving positive educated information, establishing a world class botanical garden and nurture a willingness to communicate.

The realities of organizations like ours seeking to offer a different way, an opening to see and feel the positive possibilities of a natural environment and an educational outreach for many, dictates that we can only do this with your help. Together we can establish OM as a world class exploration into the reclamation of a natural system that was once so common in our world, but today is a shrinking, evaporating wildness. We can create an educational vessel to allow all ages to learn and a helping hand to assist communities throughout Chiapas to explore the possibilities that their forest and natural lands are resources worth guarding and that these same forest can be a new financial resource by utilizing orchids and other endemic plants. We at OM can help rescue, motivate and create by curtailing the exploitation of the natural wonders and helping promote education of the peoples of Chiapas and beyond. With YOUR spiritual and financial help we can create *Orquideas Moxviquil: Jardin Botanico*, a beacon for progress and education where diverse peoples of the world can learn, enjoy, connect and relax.

Thanks for your consideration.

Cisco Dietz
Director
OM