The Monthly Magazine of the Vallarta Botanical Garden
Puerto Vallarta, Jalisco, México
June 2016 Vol. 6, No. 6

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www.vbgardens.org
Dear Friends of the Garden,

June is an exciting time for us who live in Puerto Vallarta as we anticipate the first downpours of our rainy season. Our forests will transform themselves once again from mostly brown and desiccated shadows of their former selves into a sea of budding trees and other plants. Like a sponge that miraculously swells when exposed to water, our forests will in short order take on new colors and forms that have been abandoned since last summer.

Our trees are not only the beneficiaries of these rains though, they also safeguard against erosion and form the backbone of our forest ecosystems. Collectively, the diversity and abundance of life in our forests provide a wealth of valuable benefits including water and air purification, storage and cycling of minerals and nutrients, providing habitat for native animals, and much more. As we enjoy the first rains of our season then, let’s take some time to observe the joy of nature and appreciate the wonder of our forests.

Greetings from the Gardens,
Bob Price, Founder and Curator, VBG

Solandra maxima
Photo: Aaron Nace
www.phlearn.com
Mexican Orchid of the Month

Govenia liliacea (La Llave y Lex) Lindl.
By Alejandra Flores Argüelles

This elegant orchid can be found in some of the north sates of Mexico passing through the Central Plateaus and west to the south of Mexico, continuing on to Central America. This is a terrestrial orchid that grows to approximately 90 cm high, and has two big leaves that measure up to 40 cm long and 15 cm wide, making it striking even without its flowers. It inhabits temperate places, especially pine-oak forests from 2,000 to 2,500 meters above sea level.

You can find it flowering from June to August. Its flowers are arranged in a raceme, they are white with magenta in the interior part of the petals.

Mexico has 12 species of Govenia, making it the most diverse country with this genus. Govenia liliacea is commonly called “Azucena del monte” (Amaryllis of the mountain) and is considered an ornamental plant.
Give Every Month – Become a Garden “GEM”

Dividing your contributions to the Vallarta Botanical Garden into monthly payments can help you better budget your annual giving and allows us a dependable monthly income to carry the Garden through the slower times of the year. A new Give Every Month “GEM” page is now up on the Garden’s website www.vbgardens.org for you to begin this kind of contribution today.

Commemorative Cantera Benches

Would you like to honor or memorialize someone with a permanent cantera bench at the Vallarta Botanical Garden? Benches are finished with beautiful hand-painted ceramic tiles. We can help you create a custom design with text and images of your choice. Prices are at $7,000 USD for a Banca Real (Regal Bench) and $5,000 USD for a Banca Distintiva (Distinctive Bench). Dividing this up into payments over the course of three years is a commitment of only $194 or $139 USD per month. These gifts qualify for tax deductible contributions in Mexico, the US, and Canada. Interested? Great! Please visit our website or call 322 223 6182 and ask to speak to the Garden’s Executive Director, Neil Gerlowski or Membership Coordinator, Michaela Flores.

Your Legacy Lives on at the VBG

Including the Vallarta Botanical Garden in your wills, trusts, and estate planning is an investment in the long-term viability of this important natural sanctuary for Puerto Vallarta and the exquisite flora of Mexico and world tropics. A member of the Garden’s Legacy Committee would be happy to talk to you about the best options for optimizing your philanthropic potential and further blessing a community. Please write to info@vbgardens.org.
Mexican Bird of the Month
*Spizaetus melanoleucus - Black-and-White Hawk-Eagle*

By Greg R. Homel

www.birdinginpuertovallarta.com/ birdingadventures@mac.com

In recent years, an exponential influx of birding pioneers to and within the Vallarta region has really started to ramp up local knowledge of our ornithological richness. And the growing species list—which now numbers around 400—is impressive to say the least.

Sometimes it’s tempting to assume “everything” has been discovered by now…. But every once in awhile a discovery is made that so knocks the socks off even the most avid birding pioneer, that other sightings pale by comparison. Such was the case for Canadian birder, John Gordon, who, on March 20th, decided to take a bus from Old Town Vallarta to the Vallarta Botanical Garden. Luckily for the rest of us, Mr. Gordon—who is an excellent birder—made that fateful day trip. It was his first visit… and he made history. Among the birds John Gordon saw, photographed and posted on his blog, TheCanadianWarbler.blogspot, was a mysterious raptor flying directly over the garden “against the cobalt blue sky [in] a kettle of vultures and hawks”.

A week later, Mr. Gordon contacted me, asking for help identifying some of the species he photographed… possibly assuming the photos he provided were commonly-occurring species. Included in the impressive collection was an image that made my jaw drop: It was Jalisco’s only recorded Black-and-White Hawk-Eagle!

This Neotropical species ranges primarily in montane and lowland forests from southeastern Mexico through Central America to Amazonia and Argentina, with a small number inhabiting Oaxaca and Chiapas’ Sierra Madre del Sur in West Mexico. There are, however, occasional, disjunct (by more than 1000 kilometers) sightings in southern Nayarit.

In recent years two other hawk-eagle species—Ornate and Black—have been recorded in Cabo Corrientes’ wild interior, along with Double-toothed Kite. Combined with the presence of such keystone species as Hook-billed Kite, Military Macaw, Jaguar, Mexican Beaded Lizard and others, these sightings emphasize just how important Cabo Corrientes is to biodiversity in West Mexico.

Many recent sightings of significance are reported by first-time visitors like John Gordon. And some of the best sightings have occurred right here at the Vallarta Botanical Garden. So keep your eyes and lenses pointed skyward, you may be the next to make such a discovery.
Ficus cotinifolia
Article and photos by Al Rouyer

Common Names in México – Cobó, Nacapuli, Amate prieto

The *Ficus cotinifolia* is the largest and most common epiphytic or ‘strangler’ among the fig trees in México. Epiphytes commonly begin life from a seed dropped in the branches of a host tree eventually sending out aerial roots down the host to the ground. In the soil, the roots grow and strengthen gradually wrapping around the host’s trunk and limbs, crushing its bark and inner layers like a botanical boa constrictor. The network of roots fuse together forming a massive woody envelope or “straightjacket” encircling the host. In time the host tree dies of strangulation and shading, and the strangler fig stands in its place.

The tree is native to coastal and tropical forest areas from the western Mexican state of Sonora south to Costa Rica. It can also be found growing around abandoned buildings and along rocky slopes twisting about boulders and clinging to cliff sides. Some exceptionally massive *Ficus cotinifolia* specimens can be found on the grounds of the Vallarta Botanical Garden.

**Identification:** *Ficus cotinifolia* is a medium to large tree normally reaching to about 60 feet (18 meters) although with ideal conditions it can grow to over 90 feet (27 meters) tall. The light gray bark is relatively smooth with abundant horizontal lines close to each other. Leaves are simple and alternate, oval to somewhat rounded in shape, 6 to 8 inches (15-20 centimeters) long and 2 to 4 inches (5-10 centimeters) wide. The top is bright green and smooth while beneath the leaf is lighter green with a fuzzy feel. Flowers are within the fruit, which is edible, in pairs, to a half-inch around (1.4 centimeters), green with yellow to reddish flecks.
Banderas Bay – The Heart of Our World

By: Dr. Rafael Guzmán Mejía, Communications Officer, Science Advisory Board, VBG
& Neil Gerlowski, Executive Director, VBG

Since the time of ancient legends, the Valley of Mexico, the setting of our country’s political capital, has been known as the “Ombligo del Mundo” (The Belly Button of the World). But for those of us who have fallen in love with our Banderas Bay region, this slice of paradise may be seen as the “Corazon del Mundo” (The Heart of the World). Just as the heart is the central organ that sustains life in our bodies, our region’s unique position and conditions place it at the heart of an area teeming with glorious biodiversity. These ideal conditions are not the result of random luck but are carefully determined by a host of factors including latitudinal position, topography, and the proximity of major marine currents.

Banderas Bay is located precisely at the convergence of two enormous ocean currents flowing with millions of cubic kilometers of water. The California Current, with cold water, comes down from polar regions of the North and meets with the warm water of the Equatorial Current flowing up from the South. Right here at our bay they merge together to flow towards Hawaii. Because of this, the large peninsula at the southern aspect of our bay is called “Cabo Corrientes” (Cape of the Currents).
Banderas Bay is also at the transection of two large and important biogeographic zones. Boca de Tomates, at the Jalisco side of the mouth of the Ameca River, is precisely in line with the axis of the Trans-Mexican Volcanic Belt (running east to west) and one of the few major separations in the Sierra Madre del Sur.

In broad terms, these ingredient factors are best witnessed by the diversity of biomes found in and around our bay: Mangroves, Tropical Dry Forest (both deciduous and semi-deciduous) Pine-Oak Forest, and Cloud Forest. Within each of these biomes, a fascinating array of species (many of which are endemic) are perhaps the best testaments to the botanic abundance around us. In the following very abbreviated list of highlights of our endemic species, look for the abundance of local place names incorporated into these scientific binomials: *Bessera tuitensis*, *Quercus cualensis*, *Ursulaea tuitensis* and *Magnolia vallartensis*. The Vallarta Botanical Garden is indeed blessed to be nestled in a remarkably unique and privileged location.
Useful plants of the region: Bromeliads
By Alejandra Flores Argüelles, Plant Science Coordinator, VBG

The bromeliads are a family of around 3,000 species that are very diverse in both form and habit. You can find them on the ground, among rocks and trees, and they live from sea level up to 3,000 meters in elevation. Because of the beauty of their foliage and flowers and for their easy cultivation, many bromeliad species have a high ornamental value around the world. Mexico, while rich in native bromeliad diversity, is not among the countries known for growing these for ornamental display.

The most highly cultivated bromeliad is the Pineapple (*Ananas comosus*); it is used principally for culinary purposes and it is not native to Mexico. But our region also has edible bromeliads, *Bromelia karatas* y *B. penguin*. They are called “Piñuelas”, “Timbiriche”, “Huamara” or by their Nahuatl name “Cocuixtle”. Its fruits grow in the middle of the rosette, are sweet and can be made into fresh beverages or eaten directly, but be careful, just like the pineapple, the fruits have oxalic acid, and when they are eaten in large quantities they can scald the tongue or even cut it like a blade.

Piñuelas have great cultivation potential, not only as edible plants, but can also be planted to serve as living fences and to prevent soil erosion. They are also known to have medicinal uses including the treatment of arthritis, diabetes, kidney problems or nonhealing wounds.

In the Bay of Banderas region we are lucky to have a high number of useful plant species. Learning the uses of our native plants not only adds to our quality of life but also helps us appreciate and conserve our natural resources.
Call to Artists — Exhibit with us!

By Neil Gerlowski, Executive Director, VBG
Zaidé Gómez Carillo, Marketing Manager, Plaza Galerías
& Buri Gray, President of the Board, Museo de Arte Peter Gray

Plaza Galerías, our region’s largest shopping mall, has invited the Vallarta Botanical Garden to organize another nature-based art exhibition, this time with the specific theme of “Birds and Their Habitats.” The exhibit is scheduled to be featured in the mall’s main events hall (in front of the Liverpool Department Store) from September 17th to October 13, 2016. Afterwards, the exhibit will travel to the University of Guadalajara’s local coastal campus until mid November and finally to the Vallarta Botanical Garden until the end of December.

This exhibition will especially focus on native and endemic birds and the fascinating flora of the habitats that support them. We hope to inspire a conservation-oriented public through engaging imaginations with stunning and creative human constructs interpreting our natural world.

Local and visiting artists are encouraged to submit pieces for consideration in this exhibition which will be selected by a committee of representatives from the Garden, the Mall, and the University. Pieces may include paintings, photos, and sculptures. For more information on the exhibition or how to send submissions, please write to eventos@vbgardens.org.
Consecration of the Garden’s Chapel – June 8th at 12:00 pm

The Vallarta Botanical Garden’s new chapel, Nuestra Señora del Jardín (Our Lady of the Garden) is scheduled for consecration to be officiated by Bishop Luis Artemio Flores Calzada of the Catholic Church’s Diocese of Tepic on Wednesday, June 8th at 12:00 pm. The Garden is open to the public (normal Garden entry fees apply) from 9:00 am to 6:00 pm on this day.

The consecration, while a ceremony of the Catholic Church, in no way precludes the Chapel from serving its mission as an interfaith center accessible and welcoming to all. The Garden thanks Bishop Artemio Flores Calzada for this special distinction. Also much appreciated is the planning and preparation by Father Saúl Cortes Ibarra of the church El Refugio in Puerto Vallarta, Joaquin Humberto Famania Ortega, Operative President of The Latino Coalition, and Dr. Rafael Guzmán Mejia, VBG Science Advisor. The Garden also recognizes all of the chapel’s patrons, especially lead project patrons Ruben Cota and Michael Schultz.

For inquiries about the upcoming consecration and other events in the Chapel or the Garden in general, please write to: eventos@vbgardens.org.
Don Rafael of the Sierra de Quila Natural Protected Area with some large specimens of Dioon tomasellii
Cycad Explorations in Jalisco and Beyond

*Article and photos by Neil Gerlowski*

Thanks to a collaboration between the VBG and The Huntington Library, Art Collection, and Botanical Garden, I’ve had the recent pleasure to join researchers on an expedition throughout Jalisco, Nayarit, and Sinaloa to explore wild populations of *Dioon tomaselli*, a member of the Zamiaceae family in a class of plants commonly called cycads. Cycads are ancient plants that have changed little since the Jurassic period and have an extensive fossil history indicating that they were once much more abundant and diverse than they are today. This abundance was not overlooked by our ancient ancestors. Over 7,000 years ago, *Dioon* was a more important food source for prehistoric Mexican peoples than corn.

Remnant populations of cycads exist in tropical and subtropical regions throughout the world yet are quickly disappearing in many instances. Several species have already gone extinct in modern times and many other species have diminished to populations so small that they are of high conservation concern. *Ex-situ* cycad collections in botanic gardens may help save some species from otherwise eminent extinction. Understanding cycads in their natural environment is a first step to protecting them and much about *Dioon tomaselli* remains unknown including identification of its pollinator(s) and seed dispersal agent(s) as well as understanding the full extent of its range and its extant genetic diversity and morphological variation. Contributing to some of these answers through research can allow for a more thorough and strategic approach to cycad conservation. The VBG sends its thanks to federal and state level environmental authorities for permitting for this project as well as the many local offices and individuals who assisted. Detailed acknowledgments will be shared later when the research results are published.
Gardens are closed on Mondays from April until December.

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<thead>
<tr>
<th>DATE</th>
<th>EVENT</th>
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<td>5 JUN</td>
<td>World Environment Day — Celebrate our environment with a day in nature at the Garden!</td>
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<tr>
<td>8 JUN</td>
<td>Consecration of the Garden’s new Chapel 12:00 noon — (See page 13 for more info.)</td>
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<td>2 JUL</td>
<td>National Botanical Gardens Day (Mexico) — Visit a botanical garden near you.</td>
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<td>14 JUL</td>
<td>Arbor Day (Mexico) — Learn about the fascinating and beautiful trees of Mexico.</td>
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* Some activities subject to change. The most current calendar, often with links to further event information, can be viewed at [www.vbgardens.org/calendar](http://www.vbgardens.org/calendar).

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**Garden Hours**

- **Open 7 days/wk**
- **Open 6 days/wk**
- **Early “Bird” Opening**
- **Daily Guided Tour**

**9 am – 6 pm**

for the months of Dec., Jan., Feb., & March (except Christmas & New Year’s Day)


8 am every Thursday

1 pm (Offered for the months of Dec., Jan., Feb., & March)
From the Membership Desk

June and July is when we have our greatest sustained influx of national visitors at the Vallarta Botanical Garden when many locals and others from all over the country take their summer vacations. This is an especially good time to share your love for the Garden by giving a gift of membership to local friends and family so they may return again and again.

Members: please always wear your membership card when visiting the Garden. This helps our staff and volunteers recognize you as members and offer valuable discounts on your Garden purchases and other important benefits.

Can you find your name on our Wall of Benefactors?

If you’re not yet “on the wall” we invite you to join the family that preserves the Garden forever!

Becoming a member is easy & provides great benefits: www.vbgardens.org/memberships

A high resolution image of this photograph is available at www.vbgardens.org/benefactors
We would like to acknowledge and thank the following supporters:

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JOSE DE JESUS ZAÑIGA

June 2016
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(S) = student  (I) = individual  = deceased

We Also Thank the Following Foundations for Their Recent Support:

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THE CALIBAN FOUNDATION
CHARLES H. STOUT FOUNDATION
INTERNATIONAL FRIENDSHIP CLUB
MELINDA MCMULLEN CHARITABLE TRUST
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Your Donations to the Vallarta Botanical Garden are Greatly Appreciated

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- Tax-deduction receipts are available for donations to the Vallarta Botanical Garden made through the Fundación Punta de Mita (FPM).
- Please send an email earmarking your gift for the Vallarta Botanical Garden to donaciones@fundacionpuntademita.org with a copy to info@vbgardens.org

Checks may be mailed to:
Fundación Punta de Mita, A.C.
Carretera Federal Libre 200 Km 18.05
Punta Mita, Nayarit, C.P. 63734 México.

Wire transfers: Bank: Banamex
Account in Mexican Pesos (MXN):
Account in US Dollars (USD):

Paypal: www.fundacionpuntademita.org/en/how-to-help

Canada

- Our educational programs qualify for tax-deduction receipts provided by The Canadian Children’s Shelter of Hope Foundation (CCSHF)

Cheques may be mailed to:
Canadian Children’s Shelter of Hope Foundation
87 Lavinia Ave
Toronto, ON,
M6S 3H9
Canada

Please write “VBG” for “Vallarta Botanical Gardens” on your cheques.

Alternatively, you may donate using a credit card through CanadaHelps.org (whose donation page is linked to the CCSHF website www.ccshf.ca) selecting the “Vallarta Botanical Gardens Fund.”

USA

- Our direct support 501(c)3, “Friends of Vallarta Botanical Gardens, A.C.” issues tax-deduction receipts:

Checks may be mailed to:
Friends of Vallarta Botanical Gardens, A.C.
759 North Campus Way
Davis, CA 95616

Wire transfers / direct deposits are accepted:
Please write to treasurer@vbgardens.org for routing and account numbers.

Credit Card Payments:
Call us w/ your card info:  +52 322 223 6182

Paypal: www.vbgardens.org/fvbg

Donations of stocks and IRA distributions:
- Charles Schwab Account # 46789311 DTC
Clearing # 164 Code: 40
- Chase Brokerage DTC # 0352
Account # 7422361

Thank you for your generous contributions!

Phone: 01 52 322 223 6182 (international calls) or 223 6182 (local calls)

Email: info@vbgardens.org
Web: www.vbgardens.org