

West Nile Virus Threat Focuses Attention on Ludwigia Invasion in the Laguna

The mosquito-borne West Nile virus has arrived in Sonoma County, focusing renewed attention on areas of the Laguna where mosquito control has become impossible due to the invasion of the nonnative water primrose *Ludwigia*. The plant creates dense mats of vegetation which prevent introduction of mosquito larvacide into the water, and has exploded in extent in the past few years.

Ludwigia isn't just a threat to humans. Horses are even more vulnerable to the disease. Fortunately, there is a vaccine for horses. Aquatic birds are the hardest hit: at least 62 of the 200 species of birds known to live in the Laguna are susceptible to West Nile virus, and reports of dead and dying birds in the Laguna have jumped markedly this year.

There are many theories as to why the Laguna has suddenly experienced this explosion of a single non-native plant. With the support of the Community Foundation Sonoma County, the Foundation is currently doing scientific study on how best to approach the problem and to develop a long-term solution. This is an element of the Foundation's twoyear Laguna Ecosystem Restoration and Management Plan, also funded by the California Coastal Conservancy, Sonoma County Water Agency and City of Santa Rosa.

What is clear is that the explosion of *Ludwigia* in the Laguna is a result of the degradation of the Laguna ecosystem as a whole. Water quality, sedimentation that reduces water depth, and loss of riparian vegetation are all contributing factors without which the plant could not have made such inroads. Only by improving the health of the entire system will the problem be permanently abated.

In the meantime, there is a real danger that *Ludwigia* will grow to such an extent that it can no longer be curtailed, radically reducing biodiversity in the Laguna, driving away migrating birds by covering the open water they seek when landing, and increasing public health risks and wildlife



Ludwigia choking the Laguna channel at the Occidental Rd. bridge (Sonoma/Marin Mosquito and Vector Control District)

deaths due to West Nile virus.

Last year, the Laguna Foundation convened the Ludwigia Task Force, including public agencies, elected officials, scientists and environmental organizations concerned about the plant and its impacts on public health and the health of the Laguna. The Task Force is now zeroing in on interim steps for knocking back the extent of the

(see p. 2)

Executive Director's Report—Dan Schurman



It seems that the pace of our work just keeps quickening. We've been saying for the past few years that now is the time for the Laguna, and with all the issues at play and on the front

page, as well as the Foundation moving forward so quickly, that's more true than ever. Our challenge is to capitalize on all the attention, concern and opportunities and turn them into the positive actions we know need to happen. Probably the three biggest issues recently are the *Ludwigia*/West Nile connection, the Rohnert Park casino, and the California Tiger Salamander (CTS) recovery strategy. The Foundation has been in the thick of all three.

As reported above, our staff is taking the lead on organizing a comprehensive response to the *Ludwigia* issue, laying out a short- and long-term strategy for removal and control, as well as organizing the relevant agencies to play their part in moving a solution forward. Hopefully, we'll be able to galvanize their support and mobilize our elected officials to generate the political will and funding to get it done.

Our involvement on the CTS recovery strategy team continues, with a release of the strategy document for public review and comment slated for early November. We continue to seek a solution that ensures species recovery and contributes to our vision of a Laguna Preserve. (This vision, I should mention, is one that includes and





Ludwigia from page 1

plant, as well as longer-term strategies for more permanent control. While it's not yet clear what specific steps will be required, it's likely to include a combination of mechanical removal, hand pulling, and limited application of an appropriate herbicide. What is clear is that no single approach will be effective by itself.

What is also clear is that the scope of the problem—a solid, dense blanket of the plant extending some 150 acres in the two most affected areas—is huge and the strategy will certainly carry a sizable price tag. Given the unacceptability of the alternative, it's a cost that must be assumed. The Foundation is working with public agencies participating in the *Ludwigia* Task Force and with our local, state and federal officials to identify funding sources for this essential effort.

Care for the Laguna—Forever.

Creating a Laguna Preserve and Learning Center for future generations will require that the Laguna Foundation remain a strong institution, able to continue the work of restoring, educating and advocating for the Laguna's health. That's why a growing number of supporters are including the Laguna Foundation in their philanthropy and estate planning, incurring tax benefits for themselves and helping the Foundation to thrive.

If you are planning your estate or philanthropy and would like to include the Foundation, we can help. Call Mark Green, Resource Development Director, at 527-9277 or email mark@lagunadesantarosa.org to request our brochure, *Planned Giving* to the Laguna Foundation. Thanks for considering the Laguna in your financial planning.

Executive Director's Report from Page I

embraces a variety of land uses and ownerships in the Laguna. Not meant to be a park or wildlife refuge in the traditional sense, the Laguna Preserve would be comprised of many contiguous, protected properties, some of which will be working farms under private ownership with conservation easements, or more wild lands owned by public agencies such as the Department of Fish and Game, or private preserve lands owned by the Foundation or other conservation organizations. The connecting thread will be the management practices on these lands that complement one another and collectively contribute to and create a healthier Laguna ecosystem. In this context, CTS recovery can occur on private or public land, wild or cultivated land, so long as the necessary protections are in place and the land is managed in a compatible manner.)

If any issue could be more charged than the CTS issue, it would be the casino issue, and it will draw an increasing amount of attention. A recent news story highlighted the wastewater discharge issue which, given the regulations governing discharge, is really a non-issue: there is an absolute limit on how much treated wastewater can be discharged in the Laguna and the casino would be subject to those same regulations. The bigger question for us is what are the overall impacts on the Laguna going to be from this project, and what can we do to lessen and/or mitigate them. That is why we've been in dialogue with the tribe for some time now, seeking assurances from them to engage in significant restoration on the vast majority of the property that will not be built out, as well as to participate in broader restoration efforts throughout the Laguna. We'll continue to examine and comment on the specifics of their project throughout their EIS public review process. If you're interested in knowing more details about the project, you can read the scoping document online аt http://reports.analyticalcorp.net/graton/eis-scoping/. The scoping document will lead to an EIS (environmental impact statement), which will be subject to public comment, including a public hearing. The process should commence in the next few months.

The Foundation's position on this issue is that while we're not thrilled with the siting of the casino near the Laguna, we respect the law that California voters approved regarding Indian gaming as well as the tribe's right of self-determination to pursue this project. Our feeling is that if the casino is inevitable, then we and the Laguna are much better served engaging the tribe in sincere dialogue and negotiating assurances regarding environmental impacts, restoration and mitigation, than in fighting tooth-and-nail to stop the project at all costs. We believe that approach would yield a wealthy and powerful enemy with no interest in Laguna restoration, instead of a wealthy and powerful friend committed to the rehabilitation of the Laguna.

As always, we're grateful for your support and for all the many factors that are coming together to help restore the Laguna.

Learning Laguna Returns to Local Classrooms Education Program Report

Mary Abbott, Education Coordinator

Learning Laguna, the Foundation's docent-led environmental education program, will be in elementary school classrooms through the end of October. Third, Fourth and Fifth graders all around the County spend a morning in their classroom learning about wetlands ecology, birds, mammals, insects and plants that grow in the Laguna. The classroom session is followed by a morning of fun learning activities at Kelly Farm, a City of Santa Rosa preserve on the Laguna. Our students become wildlife sleuths, looking for clues and awakening their senses. Because our docent population grows larger every year, we have added more classes to our schedule. Interested teachers may register for the program through the Foundation website, or by contacting mary@lagunadesantarosa.org. Thanks to Agilent Corporation for funding the purchase of additional materials, allowing us to go into more classrooms at a time, and to the Dean Witter Foundation, Codding Foundation, and Community Foundation Sonoma County for generously supporting this wonderful program.

Take a Walk in the Laguna

Our docent-led hikes for adults and families have proven very popular! Foundation-trained docents lead tours in the Sebastopol Preserve. A docent-led walk gives you the chance to ask all the questions you may have about the Laguna. Upcoming dates are Saturdays November 11 (8:15 AM), December 11, January 8, February 12 and March 5. Please come to the parking lot behind the Youth Annex (425 Morris St. in Sebastopol) at 9:15 am and bring your binoculars. A \$5 donation is requested for nonmembers of the Foundation. The walk is about 1 1/2 hours long and children are welcome. Call Mary @ 527-9277 to reserve a space ог email mary@lagunadesantarosa.org.

Last July, *Press Democrat* writer George Lauer featured a full length article on taking a walk in the Laguna. The photographer got some lovely shots, inspiring hundreds of people to phone the Foundation to request a docent – led walk in the Laguna. The Education Program went into high gear, recruiting all docents and staff to accommodate the requests, resulting in over 500 people touring the Preserve in Sebastopol. The walks will continue to be offered over the winter (see *box*).

The Foundation is actively recruiting new prospective docents for the Spring 2005 training course. If you have an interest in nature, want to learn more, love working with school age children and have the time – or know someone who fits this description - please contact us now. Our ability to educate the public is directly tied to the number of active docents on our roster. The training is a dynamic learning course on the science, history and lore of the Laguna filled with hands on activities and field trips. After completing training, docents become part of the Docent Circle, eligible to participate in ongoing continuing educational opportunities, leadership training, seasonal Field Notes, walks, social events and more. The next training will begin March 7, 2005 and runs for 10 Mondays. The fee for training and materials is \$125. Contact mary@lagunadesantarosa.org for details.



A recent Docent Circle continuing education workshop was "Where Do Birds Nest?". Docents build 85 nestboxes for the Laguna! Back Row: Barbara Briggs-Letson, Walter Muelken, Brian Purtill, Jymmey Purtill, Calvin Strobel, Pam Moskowitz, Harvey Moskowitz, Linda Hanes, Glenn Lippard, Raini Vallarino, Steve Vallarino. Front Row: Mary Abbott, Carolyn "CJ" Johnson, Beth Haylock. *Photo: Rick Theis*

LagunaKeepers:

Cleaning and Restoring the Laguna

LagunaKeeper season is off to a great start! Keepers attacked the *Ludwigia* in the big pond in the Sebastopol Preserve in September. and Agilent employees finished the job in October on their employee volunteer day.

Keepers have been gathering Laguna valley oak acorns to begin the restoration of the old Barlow Field on the Sebastopol Preserve. **The big planting day is Saturday, November 6 and lots of help is needed for this project.** Volunteers are encouraged to bring garbage bags full of any kind of oak duff for the project. Meet at 9am at the Chevron Station on Hwy 12 on your way into Sebastopol. Bring gloves, tools, water and friends.

For more info about being a LagunaKeeper, contact Mary Abbott at 527-9277 or mary@lagunadesantarosa.org.

A Walk on the Wild Side

Joe Honton, Project Manager, Laguna Ecosystem Restoration and Management Plan

SATURDAY MAY 15, 2004. DELTA POND. Our guide is calling out to the birds, "Pssh, pssh, pssh." We wait.

We are standing on the berm between Delta Pond and the Laguna floodplain. Below us, the checkered open spaces of the Laguna spread: fields readied for planting, green pastures for grazing, flooded marshland. Valley oaks grow in lines along the borders, emphasizing the checkerboard pattern; willows surround the seeps and troughs identifying the areas that have extra water; Oregon ash appear in an elongated path, revealing restoration possibilities to a trained eye.

We make our way slowly, stopping every few hundred feet to listen to new bird calls. A mockingbird begins to cycle through a collection of stolen songs. We use it as a living field guide; its catalog of calls changes with what's in the neighborhood. Our guide picks up the imitation call of a woodpecker. Sure enough, a minute later a Nuttall's woodpecker flits from branch to branch in a massive valley oak below us. The oak is home to a multitude of species: jays, warblers, grosbeaks, and even a brief stopover from an ever-busy swallow.

Farther on we meet the swallow's point of interest: a shallow pond and its surrounding marshland. The swallows dart down to scoop mouthfuls of silted water for construction of their mud nests. The willows grow thick here; cattails and tule grow along the water's edge before giving way to sedges and rushes, a perfect spot for water birds. Sure enough, nestled among the tall vegetation are two broods of Canada geese – four adults and six goslings.

Our focus on birds awakens our sense of hearing. "Listen to the repeating pattern," says the guide, and we do. Soon we can detect red-winged blackbirds in the tall grasses, finches in the woody shrubs, ravens overhead. Our ears screen out the rustling of the wind and hone in on a sharp cry overhead: a red-tailed hawk. We look up and see not just a hawk, but an osprey, gliding high on the current a pair of egrets, and circling farther up, a squadron of white pelicans.

We move on, drawn to the riparian zone ahead of us. Suddenly, rising out of the trees and quickly forming a "V" are a flock of nine big birds. With the sun at high noon their coloring disappears and we mistake them for one species after another. Ducks? No. Cormorants? Nope, their beaks are long and curved. Ibises! Her first sighting, a glimpse of no more than a few seconds. "Ibises are rare. We'll have to call the Audubon Society."

Our excitement stays with us as we come closer to our destination – a rookery at the end of Delta Pond. Our voices, are no match for the intense conversations being held high up in the trees. Herons, egrets and cormorants crowd the upper canopy of a stand of oaks. Hundreds of them. Juveniles break through the tree cover, test their wings on a short flight, and return home to safety all in quick turn.

One thing is obvious: this place is special and must be preserved. Just how to do that becomes the topic of conversation. How can we make these wonders accessible without disturbing the occupants? We debate solutions: what's possible, what's desirable. And then we come back to earth and trudge back to our starting point.

Back at our cars, cookies and water are welcome nourishment for the morning's exercise. We glow in the experience of the past few hours. We've gone there and come back rejuvenated, touched again by nature's wonder. And we're only a few miles from home.

Higher Education in the Laguna

Anna Sears, Research Director

The first management study written for the Laguna de Santa Rosa ecosystem was the "De Mars Report", compiled in 1977 by Environmental Studies students and faculty of Sonoma State University. Over the intervening years, a steady stream of SSU graduates have filled many of the environmental-related positions in local government and nonprofits. Some, like Denise Cadman, Natural Resource Specialist for the City of Santa Rosa and new Foundation board member, did their graduate research at field sites in the Laguna. Now, as the Laguna Foundation is embarking on a new, comprehensive *Laguna Ecosystem Restoration and Management Plan*, university students and faculty are again poised to make a key contribution.

Many SSU graduate students and undergrads seek research projects close to home that are both great learning experiences and meaningful to the community. Through the Foundation's research internships, our combined efforts expand our understanding of the Laguna and help to train future environmental professionals.

In the last newsletter, I wrote about Lily Verdone's research on the ecology of Ludwigia. Her thesis will investigate how nutrients contribute to Ludwigia growth rates key research for developing long term control strategies for this invasive species that I am working with her to With a grant refine. from the Community Foundation, we also bought electric fencing so that she can test the use of goats to control Ludwigia.

Anthropology student Lisa Williams is interviewing fishermen in the Laguna on their fish



Sherburn Sanborn

consumption rates. As part of this project, we hope to test fish for mercury contamination. Biology undergrad Marian Parker is compiling a pocket guide to the plants and animals of the Laguna, funded by a grant to the Foundation from the City of Santa Rosa. We have students looking into research projects on vernal pools and on community-based environmental organizing. This fall, Sociology of the Environment students are interviewing landowners in the *Ludwigia* invasion areas and doing related research, and 20 students from the SSU Ecological Restoration class will perform maintenance on a 10 year old restoration project near the Laguna Uplands Preserve. Many hands make light work.

We hope to expand this rich partnership with SSU students and faculty for our mutual benefit. The robust exchange of ideas and knowledge is a key component of science. Luckily for me and for the future of the Laguna, students and faculty at SSU are willing to teach, share and collaborate. It takes a community to know an ecosystem.

Thank You to our generous supporters...

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Thanks for wine, food, a wonderful location and program to Gaye LeBaron, Bea Beasley, the Hot Frittatas, the Mystic Family Circus, Ken Garr, Dan and Jan O'Connell of Vine Hill House, LynMar Winery, Lake Sonoma Vineyards, Rodney Strong Vineyards, DeLoach Vineyards, Scherrer Winery, DeSante Winery, Joseph Swan Vineyards, Wellington Winery, The Wine Selection, West Coast Wines, Le Theatre Restaurant, LaDolce V, Zix Artisan Sweets and Savories, Pansy, Sonoma West Times & News, KRSH/Wine Country Radio, Press Democrat, Performance Design Group...

...and to contributing artists Susan Adams, Barnee Alexander, Patrick Amiot, Mathilde Amiot, Warren Arnold, Jocelyn Audette, Jane Baron, Donna DeLaBriandais, Patti Buttitta, Kathleen Carr, Charles Churchill, Susan Cornelis, Louisa King-Fraser, Dana Hawley, Linda Kammer, Joyce Libeu, James Millikan, Steve Milton, Nichibei Potters, Lynne Oaks, Pat O'Connell, Hanya Popova Parker, Katherine Plank, Nancy Ricciardi, Bill Rivas, Robin Rogers, Micah Schwaberow, Amy Smith, Paula Smith, Sandra Speidel, Jack Stuppin, Nan Waters, Bill Wheeler, and Greg Zirbel...

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The Laguna de Santa Rosa Foundation, founded in 1989, works to preserve, restore, and provide opportunities for the public to enjoy and learn about the Laguna de Santa Rosa, a rich and extensive complex of freshwater wetlands on the North Coast of California. The Foundation implements preservation and restoration projects, works with landowners and public agencies to protect and improve Laguna resources, conducts educational programs for children and adults, and works to develop appropriately managed recreational opportunities for the public to enjoy the Laguna.

The 14-mile Laguna is the largest tributary of the Russian River: a complex of marshes, creeks, vernal pools and oak woodlands draining a 240-square-mile watershed extending from Cotati to Windsor and Forestville. A major stop on the Pacific Flyway for migratory waterfowl, it is home to over 200 species of birds, river otter, bobcat, coyote, mountain lion, gray fox, and rare, threatened and endangered species such as California tiger salamander and Sebastopol meadowfoam. The Laguna mitigates flooding and provides critical habitat and beautiful views in the heart of the Santa Rosa Plain.

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First Laguna Art and Garden Gala a Smash Hit!

The Foundation's first annual *Art and Garden Gala* was a rave success! Held at the lovely Vine Hill House and featuring a spectacular view across the Laguna and the Santa Rosa Plain, the Gala was a delightful afternoon of wonderful food, premium wines, intriguing and exciting entertainment, wonderful music, an auction of Laguna-themed art by prominent local artists,.



Gala attendees make their wine selections at Vine Hill House on September 19. Serving at the bar are Event Committee members Sandy Mays and Pauline Fisher and volunteer Chris Bentien (photo: Nemea Arborvitae)

Gaye LeBaron gave the keynote comments on the history and importance of the Laguna, and members of the Federated Indians of the Graton Rancheria blessed the event and the Foundation's efforts to preserve and restore the Laguna with a prayer song. It was a fun, moving, perfect event, and raised much-needed funds for the Foundation's programs.

Thanks so much to our generous sponsors, contributing artists, and wineries (listed on p. 5), and especially to our incredible **Event Committee:** Nina Arrabit, Susan Churchill, Pauline Fisher, Barbara Harris, Greta Larson, Brooks Leete, Sandy Mays, Pat O'Connell, Nancy Peter & Kathleen Woolfe, and all attendees, auction bidders and winners, volunteers and supporters for your generous help in making our first Gala a success.

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