



Homemade Hothouse by Warren Arnold



Protected seedlings
Photo Warren Arnold

While cleaning up my side yard, I came across an old hothouse I had made 30 years ago. The wood from it that the termites had not eaten I reused to build a new one. Some of the plexiglass was still intact, and I used that, too, although I had to buy two new pieces. The legs and frame of the box are 2 x 4's, and the two shelves are made of 1 x 2's. The shelves together cover an area of 11 square feet and they can easily hold 32 four-inch pots. The bottom is open to the air, but I am considering covering it with ½

inch hardware cloth. This would leave the bottom open but keep out small vermin.

I found in my "scrap pile" an old indoor-outdoor thermometer that I attached inside. It can send the current temperature directly to a read-out on my desk inside my home. The temperature inside this hothouse has gotten up to 96 degrees, and that is too warm for the seeds and seedlings I am trying to grow, so I bought a solar powered fan to blow the cool air upward. The lid to the hothouse can also be

opened to vent the hot air. Although I have seen no frost here this winter, I am prepared to keep the temperature above freezing with a candle-powered heater. So far, I have been able to keep the inside temperature 5 degrees above the outdoor temperature.

In the picture of the structure, you can see the solar panel of the fan leaning against the hothouse door. On the ground in front of the hothouse is a rusty old tomato juice can with a tall

(Continued on page 6)



Osteospermum and Snapdragon
Photo Helga George

Meeting March 17th, 2:00

Green-themed Social

The March meeting will be a celebration of everything green. Members and guests are encouraged to wear green and bring a sprig or two of your favorite green plants to show and talk about. If you have a favorite green snack or

drink to share, that will also add to the fun.

A member satisfaction and interest form will be distributed to members to get feedback on what members like best and least about the Society and would like to do in the year ahead.

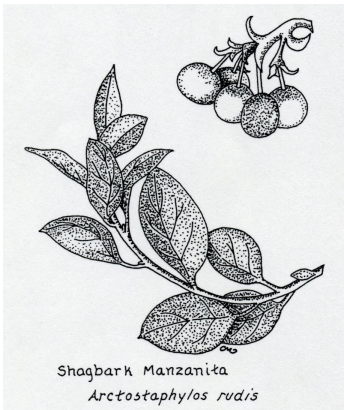
Feel free to extend an invitation to your friends and neighbors to join our Society and to attend our events as a guest.

The meeting will be held at

Stone Pine Hall
210 South H Street
Lompoc, CA
2:00 p.m.



Different Ants in Acacia Trees Have Caused Seismic Shifts on the African Savanna by Helga George, PhD



Top photo credit:

Acacia trees in Africa

Photo [21300500](#) | [Acacia Tree](#) © [Ecophoto](#) | [Dreamstime.com](#)

There is an interloper on the savanna. The acacia trees that dominate this ecosystem in eastern Africa used to coexist with a bevy of ants that lived on the trees' nectar, but an invasive ant has taken their place. Such a change might sound minor, but it has had major repercussions on the ecology of this habitat.

Recent research published in *Science* describes this change. The previous ants, which were small, would get in the noses of the elephants that used to try to eat the foliage of the trees and drive them away.

The new ants do not do this, and the elephants have been eating the leaves of acacia trees en

masse. This has left many areas of the savanna barren, which has had a major effect on lions. These hunters used to stalk their prey among the shelter provided by the acacia trees. They can no longer do this and have to hunt in the open.

Instead of zebras, the lions now hunt water buffaloes. This is a much more dangerous endeavor, and math does not favor the lions. It might seem menacing to think of a 330- to 570-pound lion, but water buffaloes can weigh twice as much (660 to 1,200 pounds).

Previous research has shown that water buffaloes went from 0% of the lions' kills in 2003 to 42% in

2020. Is this trend sustainable? Only time will tell. It takes much more energy to kill a water buffalo than to hunt zebra, and the buffaloes sometimes kill the lions during the fight.

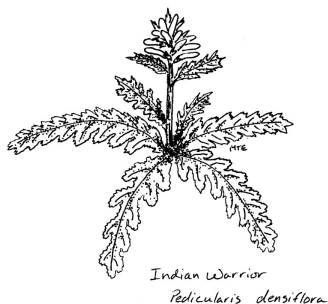
Ecologists are often written off as alarmists, but this is a good example of how what might seem like a trivial change can have major repercussions on an ecosystem.

Source:

Please note that *Science* allows you to read up to three such articles for free a month.

<https://www.science.org/content/article/how-ants-thwarted-lions-african-savanna?>

Book Review by Mimi Erland



The title *Plant Paradox* caught my eye at the library recently. The paradox presented is that we need to eat plants to survive but most plants have evolved ways to prevent being eaten, like spines and bitter

taste. This book delves into common foods with compounds that can slowly sicken a person over time.

The full title is *The Plant Paradox, The Hidden Dangers in "Healthy" Foods That Cause Disease and*

Weight Gain, by Dr. Steven Gundry.

I found the case studies from his work with patients compelling. His food suggestions and the recipes I've tried so far have been tasty and filling.

Lace Lichen (Ramalina menziesii) by Greg Donovan and Cheyenne Coxon

What is lichen?

Although some lichens can look like plants, they are actually a composite of two organisms living in a mutually beneficial partnership. Algae and fungi combine to create a structure that attaches to a substrate like tree bark or rock in order to grow. Lace lichen is commonly mistaken as Spanish Moss, which is typically associated with the oak woodlands in the southern United States. (Oddly enough, Spanish Moss is not a moss, but a type of flowering plant called a bromeliad). Lichens use sunlight and water to create energy via photosynthesis, and they can increase in length by up to 30% per year. Of the 1,869 lichen species in California, lace lichen has been designated the state lichen. It occurs along the west coast of North America and up to 130 miles inland from British Columbia to Baja California.

Does lace lichen harm trees?

This is one of the most common questions about lace lichen, and it is important to emphasize that it is not a parasite and does not harm trees. Lichen simply attaches to tree bark as a platform on which to grow and produces its own food via photosynthesis. However, trees with less foliage have more physically available space to which it can attach and

grow, which may give the appearance that it is the cause of the tree's decline. The lace lichen growth density varies greatly among trees, but there is no definitive conclusion on why this may be. Perhaps there are inherited genetic features of individual trees that encourage or inhibit lichen growth. Again, lichen thrives in both healthy and unhealthy trees, and is actually beneficial to trees and the ecosystem.

What are some of the benefits of lace lichen?

The physical architecture of lace lichen allows it to capture wind-borne particulate matter including nitrogen, organic matter, dust, and salt from the sea. These microscopic particles are washed off of the lichen when it rains, helping to enrich the soil below. Many insects use lichen for camouflage and shelter, while animals like deer, squirrels, wild turkeys, and snails use it as a source of food. Many bird and small rodent species also use lichen as nesting material. Certain air pollutants released by human activity like automobile exhaust and factory emissions directly impact lichen growth, which makes it an excellent indicator of the air quality in a region. Thriving lichens indicate cleaner air.

How do I manage lace lichen?

If the appearance is undesirable, lichen can be re-

moved from trees, but there is no way to prevent its growth. Depending on the tree size and the amount of lichen, this can be a painstaking process, and since lichen is not harmful, it would be purely cosmetic. It is therefore up to the discretion of homeowners and range managers whether they wish to undertake such intensive tree canopy management.

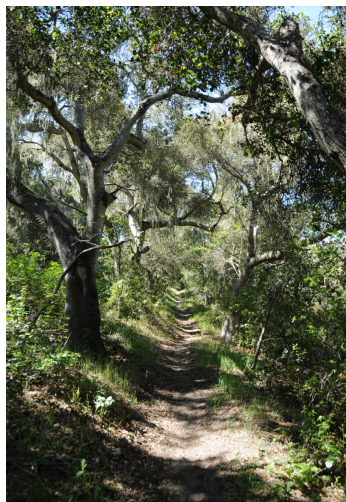
A source on local plants for further reading:

Wildflowers & Other Plants of the Cachuma Lake Area, Santa Barbara County by Chick Hebert and Liz Gaspar - Lichens p. 156-157



Lace Lichen
Ramalina menziesii
Photo Mimi Erland

California Arbor Week *submitted by Elena Jones*



Coast Live Oaks shading a path at La Purisima Mission. Photo taken by Mimi Erland on a walk led by Charlie Blair and Connie Geiger in 2015.

California Arbor Week March 7-14, 2024

California celebrates Arbor Day on Luther Burbank's birthday (March 7th), honoring him as the father of California's agricultural industry. The celebration may continue until March 14th.

"We make an immense mistake when we think of trees as solely an aesthetic member of a community. Trees cut pollution, they cool the air, they prevent erosion, they muffle sound, they produce oxygen. Then, after all that, they look good. USDA estimates that the net cooling effect of a

young, healthy tree is equivalent to ten room-size air conditioners operating 20 hours a day. Finally, landscaping, especially with trees, can increase property values as much as 20 percent." Chuck Goodwin, Arbor Day Chairman CGCI

Further resources are available at [Benefits of Trees | California ReLeaf](#)

What Tree to Choose?

If you are thinking of planting a tree in front of your house, the City of Lompoc has a list of recommended trees for city rights-of-way that can be found on the city website at:

<https://www.cityoflomdoc.com/home/showpublisheddocument/946/636655346200670000>

In Memoriam *by the Communications Committee*

It was with great sadness that we learned of the passing of our life-member David Lemon on Feb. 10th. He was 89 years old and one of the charter members of LVBHS.

When forming our Society, David was instrumental in requesting that cultivated horticulture be included along with the study of our local plants. He was a strong supporter of spreading the Society's wealth to others with grants for schools, city projects, flower show awards and the local library for horticultural books.



One of many garden care days David attended. David Lemon on left, with Judy McKinnon, Rosemary Holmes and if anyone can identify the volunteer on the far right, please let Mimi know (possibly Sandra Ploutz?).

We will always be grateful that David suggested inviting local seed breeders to donate excess plants for the highly profitable plant sales we held in the past.

He will be remembered by us all for his generosity with sharing his knowledge of plants and for bringing beautiful flowering plants to our exchanges.

In lieu of flowers, please consider planting a tree.

An obituary by David's son, Kyle, is available at:

<https://www.starbucklind.com/obituary/david-lemon>

Gardener's Bulletin Board

California native plant class March 25 - May 18, at the Lompoc campus of Allan Hancock College. The eight-week program will include both morning lectures and outdoor activities.

The Lompoc Community Garden is having a plant and seed exchange Saturday, March 16, 10:00-1:00 at the First Christian Church, 1517 West College Ave.

Garden tour planning

Please consider sharing your yard with LVBHS friends this summer. This is a fun event where we visit 3-4 of our member's gardens to see their plants and hear how they care for them. Let Mimi know.



Coreopsis

Coreopsis gigantea

The giant coreopsis may be blooming soon on the bluffs at the far west end of Ocean Ave. where it meets the beach.

Membership Meeting Minutes from January 21, 2024

The meeting was called to order by Mimi Erland at 2:03pm

Business

Minutes from November 19, 2023, filed as written

Treasurer's Report - On behalf of Carl Jones, Mimi presented the treasurer's report for the general meeting:

The opening balance as of Nov 1, 2023, was \$16,132.33.

Since then, debits -\$45.85 (Nov. newsletter printing); credits: \$15.00 (donation).

As of 12/31/23, the closing balance was \$16,101.48. Petty cash balance: \$10.00.

Annual report; 2023 operation costs \$1,016.85; loss - \$871.85. We need more donations or a fundraiser.

2024 proposed budget presented.

Budget accepted as presented (editor's note: contact Carl for a copy).

Committee Reports

Newsletter - Editor Mimi

Erland indicated that she always needed articles.

Other committees: nothing significant to report.

New Business

- Election of officers
- President - Mimi Erland confirmed
- Vice President - Patcine Beaman confirmed
- Secretary - Christine Zuhlsdorf new

Treasurer - Carl Jones confirmed

Julie Levy made a motion proposing the increase in speaker's honorarium from \$100 to \$125. Elena Jones seconded the motion. All in favor: 11; Nays: 0; Abstained: 1. Motion passed by majority.

Announcements

- Renewal of annual membership fees: \$15 per year
- The next garden care day is Feb 3 at the Burton Mesa Chaparral Garden from 9:00am to 12:00pm.

We will trim pathways and pull invasive grasses, including African Veldt Grass.

- The Red Bluff Garden Club has a class, "Flower Show School", scheduled for March 2024. Our January newsletter has information on it.
- Next LVBHS membership meeting: March 17, 2024, at Stone Pine Hall. "Everything Green" theme: bring green plants or food, wear green, celebrate green.

The Committee to review the LVBHS Constitution and Bylaws was joined by Warren Arnold.

The business portion of the meeting was adjourned at 2:22pm.

Followed by a presentation on "How Plants Use Chemicals to Defend Themselves" by Helga George, PhD.

Respectfully submitted by Christine Zuhlsdorf, Acting Secretary

Garden Care Day

Saturday, April 20 9:00-12:00 will be our next garden care day at the Drought Tolerant Demonstration Garden. Bring pruners, a rake, a shovel and a large bucket or wheelbarrow if you can. We will be trimming along the paths and weeding.

Lompoc Valley Botanic and Horticultural Society

LVBHS

C/O Carl Jones—Treasurer
416 North C Street
Lompoc, CA 93436

BOARD MEMBERS:

President

Mimi Erland 315-7105

Vice President

Patcine Beaman 588-7498

Secretary

Christine Zuhlsdorf
czrelating2plants@gmail.com

Treasurer

Carl Jones rayjones267@yahoo.com

At Large Representatives:

Elena Jones 450-3668

Bonnie Bigelow 717-0960

Mark Zuhlsdorf

mzrelatingtoplants@gmail.com

COMMITTEES:

Botany/Chaparral Garden

Elena Jones 450-3668

Charlie Blair 717-0067

Allyssa Imano 588-7598

Horticultural/Drought Tol. Garden

Mimi Erland 315-7105

Carl Jones rayjones267@yahoo.com

Education

Christine Zuhlsdorf
czrelating2plants@gmail.com

Membership

Helga George 705-6857

COMMUNICATIONS:

Communications Chair; Publicity & Social Media

Elena Jones edavey@hotmail.com

Books and DVDs

Charlie Blair blaircharles491@yahoo.com

Newsletter

Mimi Erland mimierland1@gmail.com

Helga George 705-6857

Website

Julie Levy lvbothortsoc@gmail.com

Hothouse, cont.

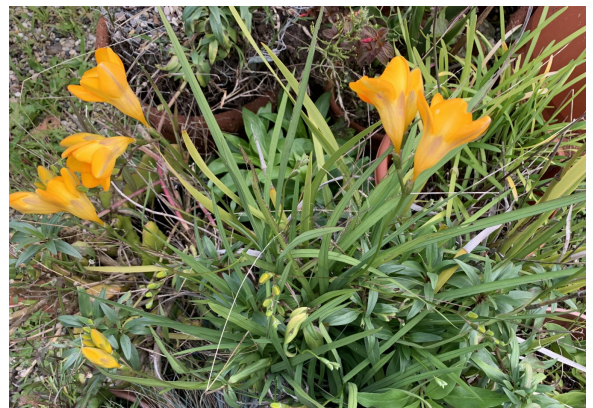
(Continued from page 1)

candle inside. The candle heats the can which then radiates the heat in all directions. This heater is placed on the bottom shelf on cold nights.

One mistake I made was to build the box first and then go look for plexiglass to fit. Plexiglass comes in cut sizes. You can make it smaller, but you can't make it bigger! I had to use extra trim to cover up the spaces not covered by the glass. This structure is no work of art, but it is functional, and I think I will enjoy the plants I plan to grow in it.



One of David Lemon's many Regal Pelargoniums. See article pg. 4



Freesias in Helga George's garden