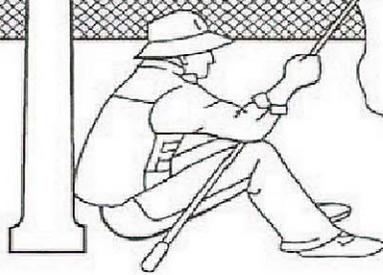


NETWORK

**Newsletter of the
Lorquin
Entomological
Society**



Masthead by Rick Rogers

Vol. 118 November 2015

**November 20 featured speaker to be Kathy Burkholder
"Butterfly Gardening: Build It and They Will Come"
Meeting will be held at Bio Quip Products.**

Kathy Burkholder will be our speaker Friday night, 20 November 2015, and will us give a presentation on the subject of butterfly gardening and attracting butterflies and other "wildlife" (mainly arthropods) to your yard in what she calls "Build it and they will come." Additionally, she will expand on "using your guests and visitors for educational purposes."



Kathy is purveyor of "Kathy's Critters," an "edu-tainment" (educational entertainment) service. She and her troupe bring their misunderstood menagerie to your location and provide an

educational live animal presentation for your child's birthday party, school, scout meeting or special event. They specialize in insects, arachnids, reptiles and amphibians. Kathy's Critters (you can find them at www.KathysCritters.com) also presents educational lectures at Garden clubs and Garden Centers (for "Building a Butterfly Garden" or "Pests and Good Bugs" Lectures) as well as perform educational programs or set up a "Misunderstood Petting Zoo" at county fairs, shopping malls, corporate family events, family reunion events, and much more.



Kathy has been a member of the Lorquin Society since 1991. Says Kathy, "I have worked with animals for 30+ years, having worked as an animal control officer for the SPCA, an Agriculture pest controller and as an "Insect Zoo Keeper" for the Natural History Museum of Los Angeles County and continue in this field with Kathy's Critters." She also attends many annual Invertebrates- in- Education and Conservation Conferences for her continued educational training. Her degree is in Horticulture with a special preference for California Native plants and Entomology.



If we're lucky, she may have some recent video of overwintering monarchs at Pacific Grove for us also.

Lorquin 2015 Meeting Dates

November 20* (Thanksgiving 11/26) Kathy Burkholder presents, Build it and they will come, as she shows us her Beautiful garden/butterfly garden and shows us what came there Winter, Spring, Summer and Fall. **December** Unless otherwise noted, expect we will meet informally at the Bio Quip Open House.

The Battle of the Ants at El Dorado Park East

by Michael Martinez (photos by Kim Moore)

I have long been interested in the impact of non-native, invasive species on native species in the ecosystem. In this article I am focusing on invasive ants in El Dorado Regional Park East in Long Beach, CA, which I have been observing for more than three decades. These are my observations at this one park, but they may be relevant to many of our urban areas.

The highly invasive, non-native Argentine Ant (*Linepithema humile*) is the Genghis Khan of the ant world and has become very well established. These ants have wiped out many of our native species. The reason for these raids by the Argentine Ants is to eliminate any competitors for food and resources by killing all the defending ants and preying on their brood. In other words, *to the conquerors go the spoils!* They continue to invade new territories.

"The foreign policy aim of ants can be summed up as follows: restless aggression, territorial conquest, and genocidal annihilation of neighboring colonies whenever possible. If ants had nuclear weapons, they would probably end the world in a week."

*- Bert Holldobler and Edward O. Wilson,
Journey to the Ants 1994*



California red harvester - *Pogonomyrmex californicus* attacked by Argentine ants - *Linepithema humile*

The largest native ant in the park was the California Carpenter Ant (*Camponatus clarithorax*). I have not seen it for quite a while, and I believe the Argentine is responsible for its demise. The native Odorous House Ant (*Tapinoma sessile*), now too seems to have disappeared. One other native species I have not seen in the park for over thirty years is the Gray Field ant (*Formica francoeuri*). In those earlier years, on several occasions, I observed the Argentine Ants raiding the nests of those much larger ants. The minute native ants, 1.5 mm or less, such as the Little Black Ant (*Monomorium ergatogyna*), and the Thief Ant (*Solenopsis molesta*), are not displaced by the Argentine Ants and these tiny ants may possibly prey on the Argentine Ants' broods. Another native ant that one rarely sees is *Hypopnera opaciceps*, because it is small with only about a dozen workers per colony, and is hypogaic (subterranean) and seldom surfaces.



Guinea ant - *Tetramorium bicarinatum* attacked by Southern fire ant - *Solenopsis xyloni*

Other small, mid-sized, and larger native ants still established in the park include the Black Pyramid Ant (*Dorymyrmex insanus*), the Bicolored Pyramid Ant (*Dorymyrmex bicolor*), Southern Fire Ant (*Solenopsis xyloni*), and the California Harvester Ant (*Pogonomyrmex californicus*), but they too may also be under attack by the Argentines. Much less infamous, but probably an equally widespread invasive species, is the Guinea Ant (*Tetramorium bicarinatum*), believed to be originally from Southeast Asia. It is now found in many subtropical and tropical parts of the world. It makes large nests with several queens at the base and in the cavities of trees, under stones, under turf, and under thick plant cover. I have found that *T. bicarinatum* is antagonistic to some native ants. I have seen them attacking lone workers and dealated queens of the California Harvester Ant (*Pogonomyrmex californicus*). A dealated queen is a mated queen ant looking for a place to start a colony. I also have seen *T. bicarinatum* in skirmishes with the native Southern Fire Ant (*Solenopsis xyloni*). Sometimes the Guinea Ants will displace the Fire Ants.

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Guinea Ants are now established where there used to be nests of the native Western Bigheaded Ant (*Pheidole hyatti*) which are now gone. The Guinea Ants I have seen will often be driven out of their territory by the Argentine Ants but will also sometimes drive the Argentine Ants out or retake the lost territory. I first found the Guinea Ants in March 1993. There was a small nest in area 2 by the stream by Horseshoe Lake and also some nests in area 3 in and around the Golden Grove picnic area. Since then, this ant has expanded greatly in both areas.



Minor and Major Caribbean big-headed ant - *Pheidole moerens*

Tree (*Albizia julibrissin*), and in a Coast Live Oak (*Quercus agrifolia*).

I also found a new player, the non-native Caribbean Bigheaded Ant! This is the first time I have seen these non-native ants in the park. The Caribbean Bigheaded Ant (*Pheidole moerens*) is in the genus *Pheidole*, with over a 1000 species worldwide, the largest ant genus in the world. They are characterized by a dimorphic worker caste. The minors have a typical ant form but the majors, or soldiers, have disproportionately large heads and powerful mandibles that function in defense and cutting up insect prey. *P. moerens* is native to the West Indies. It is known from Florida and some other southern states. First found it in California in Long Beach Shoreline Park (Martinez 1997) and new Orange County records (Martinez, et.al. 2011). *P. moerens* are very minute; the workers are about 1 to 1.25 mm. and the majors 2 to 2.25 mm.

I found *P. moerens* nesting at the base of California Sycamore trees (*Platanus racemosa*) along with the Velvety Tree Ants and Guinea Ants. Some Argentine Ant nests are also present at this site mostly on the periphery, and have not penetrated the core areas where the other ants are. *P. moerens* often raid the nest chambers of larger ants to prey on their broods and stored food. In Orange County there were *P. moerens* nests among Argentine Ant and Red Imported Fire Ant nests. They could have very possibly been preying on these larger ants' broods.

I believe the Guinea Ants will have an impact on some of the native ants such as the Southern Fire Ant and perhaps the Velvety Tree Ant, but it is the Argentine Ant that can extirpate all the native ants mentioned here.



Velvety tree ant - *Liometopum occidentale*

Minutes of the Lorquin Entomological Society: October 23, 2015

General

The meeting was called-to-order at 8:03 pm by President Bob Wuttken. The meeting venue was the office of BioQuip Products in Dominguez Hills. Approximately 30 members and guests attended. An attendance sheet was circulated.

Guests were Bud Foshee, Teresa, a Biologist and friend of Jeanne Bellemin, and her friend, Jody. There was no Treasurer's report.

Announcements

Bob Wuttken announced that the office of Lorquin Society Secretary will be vacant as of January, 2016. Acting Secretary, Bill Gendron, has decided to step-down after 9 years of service. If anyone is interested to assume the duties of Secretary, please talk to Bob at the November meeting or send mail if you are not planning to attend.

Old Business

None

New Business

None

Collecting Reports

Rick Rogers spoke of his recent trip to Bob's Gap, near Valyermo, where he found a fall flight of *Chlosyne neumoegeni* (Lepidoptera). He reported that Rabbit Brush is still blooming and that collecting opportunities would persist for at least another week.

Program

The team of Tracy Drake and Emile Fiesler spoke to us about the Madrona Marsh Preserve, located in Torrance. They both conveyed their passion for this natural oasis which is surrounded by an urbanized city. The Preserve is

comprised of 44 acres of undeveloped land.

Tracy Drake became the Manager and Naturalist of the "Madrona Marsh Preserve and Nature Center" in January 2002. After graduating from Cal State University, Long Beach, in 1987 with a degree in Recreation, Tracy worked as a teacher and was promoted to Principal at one of Orange County's outdoor science schools. After leaving the outdoor school program, Tracy earned a Master's in Outdoor Resource Management with an emphasis on Environmental Education from Indiana University.

Tracy presented an overview of the Preserve; touching upon its history, its mission, and how it plays a role in the lives of the thousands of visitors every year. Many visitors are children and students of all ages. At Madrona, they get hands-on experience with nature topics, making use of lab facilities located in the Preserve's Nature Center.

Emile spoke about the Bio-assessment that was completed from 2009 to 2012. In that work, all fauna were identified to provide a Biological Inventory for the Preserve. Emile is largely responsible for the Entomological portion of that work, using photography alone to gather data. In so doing, 690 species of Mollusks, Arachnids and Insects were identified. Many interesting taxa were found, including Fairy Shrimp, an endangered species, which awakes when vernal pools receive winter rains.

Summing-up, Tracy mentioned that land-management practices have changed by virtue of the knowledge gained during the study period, with focus on reducing disturbance and keeping Madrona Marsh Preserve as wild as possible well into the future.

The meeting adjourned at 9:15 pm

Next Meeting

The next LES meeting will be Friday, November 20, 2015, 8:00 pm, at the offices of BioQuip Products in Dominguez Hills, CA.

The above, 'Minutes,' were submitted by Secretary, Bill Gendron, on November 15, 2015.

Important Lorquin Contacts:

President: Bob Wuttken

bobwuttken@yahoo.com

Secretary: Bill Gendron

speydiana@aol.com

Treasurer temp pro: Jerri Larsson
(310) 667-8800

Membership/Newsletter: Dave Wikle
wikleps2@earthlink.net (714) 747-9609

Website:

<http://lorquinentomological.weebly.com/>

Website Email:

lorquinentomological@gmail.com

Natural History Museum LA County:
www.nhm.org (213) 763-3363

MEMBERSHIP AND DUES

\$10 Student; \$15 Regular;

\$25 Sustaining; \$200 Lifetime.

Make Checks Payable to:

"Lorquin Entomological Society"

See Jerri or pay at the meeting.

Dues now January to January

BioQuip Products, Inc.
2321 Gladwick Street
Rancho Dominguez, CA 90220
Phone (310) 667-8800

From the 91 Freeway - take Wilmington exit south to the signal at Gladwick and turn left (east). Continue on Gladwick to BioQuip (about ½ mile), northwest corner of Gladwick & Rancho Way.

From the 405 Freeway - take Wilmington exit north to the signal at Gladwick and turn right (east). Continue on Gladwick to BioQuip (about ½ mile), northwest corner of Gladwick & Rancho Way.

