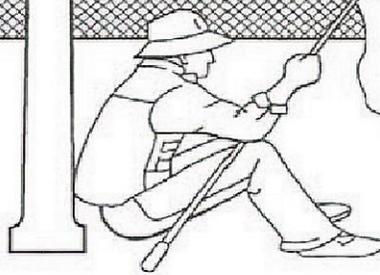


# NETWORK

Masthead by Rick Rogers

**Newsletter of the  
Lorquin  
Entomological  
Society**



Vol. 141 May June 2018

June 1, 2018 Speaker to be Dr. Joseph Parker

**"An inordinate fondness for rove beetles: How ants have shaped beetle diversity"**

Meeting will be held at Bio Quip Products **Friday June 1, 8pm**

Joseph Parker is an assistant professor in the Division of Biology and Biological Engineering at the California Institute of Technology. His research focuses on a fundamental question in biology: How predictable is evolution, and to what extent is evolutionary change predetermined by ancestral conditions? Joe established a unique model system to address this question: rove beetles that live symbiotically inside colonies of ants and termites. Such species embody evolution in the



extreme, with dramatic behavioral, anatomical and chemical adaptations for life as social parasites. Joe has collected and studied these beetles since childhood, and his work has revealed how their remarkable adaptations have in fact arisen convergently many times, illuminating the question of how predictable complex

evolutionary change can be. Not content with studying these beetles' natural history, Joe trained as a *Drosophila* geneticist, with the goal of transferring the genetic expertise he acquired to rove beetles, which now form the basis of his lab's research at Caltech.

Parker, a native of Wales, studied zoology during his undergraduate education at Imperial College London and received a PhD from the University of Cambridge in 2006. Prior to arriving at Caltech, he held a Sir Henry Wellcome Postdoctoral Fellowship and an Ellison Medical Foundation scholarship at Columbia University.



## *Lorquin 2018 Meeting Dates.....Speaker Lineup 2018*

**MAY** no meeting..See you at the Bug Fair May 19-20! **and note the early June meeting date!** **June 1:** Joe Parker, CalTech: co-evolution between ants and ant-associated rove beetles; **July & August:** No meetings School out! Catch some bugs!!!! Come back **September 28** for the Annual Show & Tell+Meeting; **October 26: November 30:** TBA **December:** Most Likely an impromptu gathering of members at the Bio Quip Open House but we'll see!

March, & April Meetings were at the Museum, then we're back to Bio Quip for the balance of our 2018 slate

## A Book Review In Three Pieces

*The Dragonflies and Damselflies of Santa Barbara County, California*, by Nick Lethaby. Self published, 2017. 91 pp. \$17.00, available only via Amazon (<https://www.amazon.com/Dragonflies-Damselflies-Barbara-County-California/dp/153902105X/>).

### One. Dennis Paulson

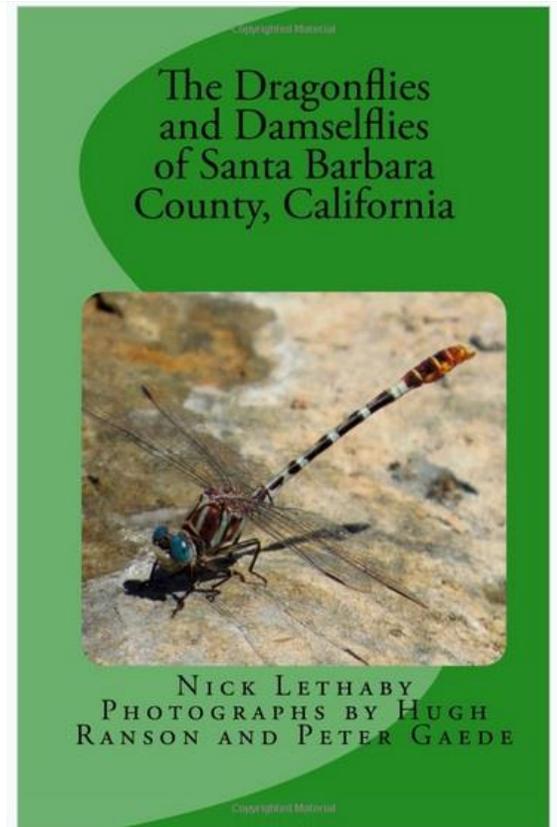
Nick Lethaby has pulled together all the information available on the odonates of his county, including the Channel Islands, and published it in this small but significant book. It covers 53 species, from those that are abundant to others that have been recorded only once or a few times. Each species has its own page, and although this is not an identification guide, each is illustrated with a photo taken in the county, a nice touch. Because the book isn't printed on photo-quality paper, some photos are a bit dull, but they suffice perfectly well to show the species. There are also helpful habitat and locality photos.

The author includes an extensive discussion of Santa Barbara County regions and habitats germane to odonate occurrence. To this he adds an interesting further discussion of the dynamics of distribution of both resident and transient species, including annual migrants as well as vagrants from Mexico. With the intensity of fieldwork possible in a restricted area such as a county, he has accumulated good data to back up his conclusions.

Because of anthropogenic habitat change and especially because of prolonged drought, species come and go, with a basically unstable odonate fauna. Lethaby anticipates the return of riverine species lost to drought and speculates on the effect of drought on vagrancy. As water bodies dry up, odonates move around and appear in new places—at least until there are no more water bodies for them to colonize. Let's hope we're not heading in that direction.

This is the sort of book that would be helpful for any small region that it would cover and should serve as an example for odonate enthusiasts everywhere. How about planning to know everything there is to know about the species within your own county?

**Dennis Paulson, Director Emeritus  
Slater Museum of Natural History  
University of Puget Sound  
Tacoma, WA 98416**



### Two. Dave Wikle.

Short and sweet. From the perspective of the avocational entomologist, and a moth nut at that, I found the book to be perfect for my needs. Just the right amount of "info to go," in terms of taxon identification, habitat, and necessary tidbits to help the neophyte or the out-of-towner or anybody interested in the quest regardless of expertise.

While it is only a small regional guide, it shows the local phenotypes (perhaps to the exclusion of any others, but that in itself may

be helpful) and I really like my insect lessons in bite size pieces. As much a function of the limited number of species present locally as it is the thoroughness of the coverage, the book, in its confined scope, delivered for me. Had it been coverage of "Southern California" in its entirety instead, it may have become too unwieldy for my perceived value.

As a Noctuid nut, where it seems there can be hundreds of species in a genus sometimes, many of which "look the same," I find my greatest enjoyment is more in the field and identifications there than on the other side of the dissecting scope and relish the thought of learning the Odos where the bugs are distinctive in maculation. While I may be a moth nut, I long for opportunity to expand my horizons into other orders, and this volume was a wonderful eye opener for me. I particularly liked the coverage of what may also be there and what should show up as well.

**Dave Wikle  
Editor, Lorquin Entomological Society Newsletter  
Field Associate, LAC NHM Entomology Section  
Research Associate, CDFA PPD**

### Three. Jeff Cole

Dragonflies and damselflies have received an incredible amount of attention in the last two decades. Owing to their large size, aerial acrobatics, and vivid colors, the Odonata now rival the Lepidoptera as the gateway drug+order that diverts and hooks birders and general naturalists on Entomology. Compared with the megadiverse Lepidoptera (inclusive of moths), an attractive property for the amateur naturalist is the chance of finding and knowing the majority of local species: the small size of the order (~5000 species), combined with their conspicuousness and generally large population sizes, has led Odonata to become one of the most thoroughly known insect orders at the species level.

Nick Lethaby's book is the latest of several books that cover the California Odonata fauna and are aimed at amateur naturalists. Before Los Angeles and Orange County residents question the limited geographic scope, consider the mobility of adult Odonata. With supremely developed powers of flight, odonate species can and do disperse widely across the landscape. For example, one third of the entire California state fauna (~115 species) may occur at single localities such as Del Puerto Canyon, Stanislaus County (R.W. Garrison, pers. comm.), Willow Lake, Plumas County, and Dos Palmas Preserve, Riverside County (J.A. Cole, pers. obs.). In covering a large California county, this field guide identifies the majority of southern California Odonata.

The form factor of this tome makes it an ideal pocket field guide. The species accounts are brief and focus on biogeography and ecology, which I found to be a refreshing change from dry lists of identifying characters. I am already familiar with the California state fauna, however; a beginner may have difficulty separating some of the species, especially damselflies, without a discussion of diagnostic characters, although once this guide alerts a naturalist to the possible species, diagnostic information may be gleaned elsewhere. Although I am not a proponent of insect common names, I acknowledge that amateur naturalists often begin by using them. This book does well to include scientific names in a prominent position next to the common names in the species descriptions.

This book brought me up to date with some of the incredible additions to the California State Fauna over the last 15 years since I switched my specialization from Odonata to Orthoptera. Southern Californians may observe subtropical vagrant dragonflies such as *Pseudoleon superbus*, *Aeshna psilus*, *Tramea calverti*, and *Erythemis vesiculosa* that fly in from breeding populations more than 500 miles distant! If that is not an incentive to get out in the field, I don't know what is! As a further incentive to hit the field, the author does an excellent job of suggesting species that are likely to be found in Santa Barbara County in the future.

The introductory sections contain what I feel are the most valuable contributions of this book. Rather than reiterate basic biology and life cycle information, the author focused on biogeography and specialized ecological subjects: migration and population responses to drought. Addressing the last of these topics, this book was written during an unprecedented ecological event, the most severe California drought in 500 years. The author advances hypotheses that may explain odonate population responses to drought, and offers baseline data in the form of the species accounts and relative abundances. This work thus offers a valuable starting point for longitudinal study of responses of dragonfly populations to drought. Hopefully this work will stimulate citizen scientists to engage with and contribute observations on these ecological topics alongside life listing the fauna.

**Jeffrey Cole, Ph.D.**  
**Assistant Professor of Biology**  
**Pasadena City College**

**Research Associate**  
**Natural History Museum of Los Angeles County**  
**Entomology Section**

## MINUTES of the LORQUIN ENTOMOLOGICAL SOCIETY April 27, 2018

**General:**

The meeting was called to order at 8:00 by president Jeff Cole.  
 The meeting venue was the LA Museum of Natural History.  
 13 members and 22 guests signed the attendance sheet. The guests were largely students from Rio Hondo College and El Camino College, attending for extra credit.

**Announcements:**

Lisa Gonzalez from the museum had several announcements: there were free publications on the back table, the Butterfly Pavilion is now open, Bug Fair is coming May 19 & 20, and the Museum is one of the organizers of the City Nature Challenge 2018. It is a competition between 69 international cities to document observations through iNaturalist. Check out this site: <https://www.inaturalist.org/projects/city-nature-challenge-2018-los-angeles>.  
 Short notice: UC Riverside Insect Fair is April 28, and on May 2, Eric Gordon is speaking at UC Riverside Entomological Society  
 There is NO Lorquin meeting in May. Next meeting is June 1.

**Old Business:**

We still need a candidate president for 2019

**New Business:**

none

**Collecting Reports and Observations:**

Emile Fiesler presented photos he and Kat Halsey had taken of two particularly interesting finds at the Tejon Invertebrate Bioblitz. The first was a bioluminescent flatback millipede *Motyxia monica*. The nocturnal *Motyxia* are blind, eat detritus, and

defend themselves with toxic hydrogen cyanide. The bioluminescence is a warning signal for mammalian predators, including mice. The *Motyxia* species are only found in a relatively small range in Southern California from the Southern-most Sierra Nevada Mountains south to the Santa Monica Mountains, which includes large parts of the Tejon Ranch.

The second find was snail. Previously the only snails found by the group were aquatic. This one is most likely *Helminthoglypta berryi*, a quite obscure species first described from land near Bakersfield in the Central Valley. Emile showed some video clips which Kat had taken of both specimens, which are now happily housed at the museum. More to come from Tejon at future meetings.

**Program:**

David Gray of California State University Northridge, presented Field Crickets: Sound and Systemics. He discussed his interest as a behavioral ecologist in the sounds that crickets make and who mates with them. He corrected some common misunderstandings including how crickets make sounds with their wings and not their legs. Only males make sounds, but not all males make sounds. Some have to trade off making a sound to attract a mate with becoming the victim of *Ormia ochracea*, a tachinid fly that hears the males and parasitizes them. He described his research and female responses to chirp rates and pulses. Species identification is difficult if based on morphology but, by studying song and female response, many more species have been identified. A lengthy Q&A session followed.

**The meeting adjourned at 9:15pm.**

**Next meeting:**

The next LES meeting will be 8PM Friday, June 1, at the offices of BioQuip Products in Dominguez Hills, CA.  
 MAY no meeting. See you at the Bug Fair May 19-20! ¡ and note the early June meeting date

The above Minutes were submitted by Secretary Kim Moore on May 1, 2018

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**Natural History Museum LA County**  
[www.nhm.org](http://www.nhm.org) (213) 763-3363

**MEMBERSHIP AND DUES**

\$5 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

LES Gratefully Thanks the NHM Staff for hosting the past several meetings!

**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.

