

---

## CURRENT RESEARCH ON PLECOPTERA

---

This section is intended to keep society members current on research in progress by other members, workers and students. Please use Editor Stewart's e-mail address (inside front cover) or conventional mail to submit a brief, informative description of your current work, for the next PERLA (18).

---

### **Research in Dr. Boris C. Kondratieff's Lab., Colorado State University.**

1. Completing with R. F. Kirchner, R. W. Baumann and B. J. Armitage a project on "The Stoneflies of Ohio".
  2. Completing with R. W. Baumann and P. P. Harper a project on "The Stoneflies of Atlantic Canada".
- 

### **Research in Dr. K. W. Stewart's Lab, University of North Texas**

1. Doctoral student John Sandberg (John completed his Master's under Dr. Stan Szczytko; see bibliography) has begun a study of the systematics, behavior and ecology of the stonefly genus *Isogenoides* Klapalek of North America. Objectives are to: (1) comparatively describe all life stages of the currently recognized 9 species, (2) resolve species delineation of problematical species (example: *I. hudsonicus* Hanson, previously synonymized with *I. frontalis* (Newman)), (3) correlate the nymphs of all species through rearing, (4) utilize reared virgin adults to determine the drumming and possible search behaviors of selected species, (5) determine the life histories and voltinism of at least one eastern and one western species. This work should result in a complete revision of North American species with illustrated keys to all life stages and greater knowledge of the behavior and ecology of selected species.

If you have preserved *Isogenoides* material or are working in the field with any of the species, please contact John at jbs001@students.cas.unt.edu.

2. Former doctoral student Dr. Kevin Alexander, now at Wayne State College in Wayne, Nebraska, has had his doctoral work on "Revision of the stonefly genus *Suwallia* Ricker", accepted for publication in Transactions of the American Entomological Society. It should be published sometime in mid 1999.
3. Ken Stewart and Stan Szczytko are working to rear and describe the currently unknown nymphs of all western North American *Isoperla*. We have a manuscript in preparation on the nymphs of *I. decolorata*, *I. katmaiensis*, *I. denningi* and *I. roguensis*, and Ken Stewart will try to collect and rear nymphs of *I. baumanni*, *I. gravitans* and *I. tilasqua* in early May, 1999.
4. Ken Stewart and Bill Stark have begun an update and 2<sup>nd</sup> Edition of their 1988 "Nymphs of North American Stonefly Genera (Plecoptera)". If you have comments or suggestions resulting from your use of this book, and especially the keys, please contact us.
5. Ken Stewart and Mark Oswood continue in their preparation of a book manuscript on "Stoneflies of Alaska and Northwestern Canada".

---

---

### **Research in Dr. Bill P. Stark's Lab, Mississippi College.**

Bill continues to work on *Anacroneuria*; papers have just been published on the fauna of Costa Rica and Panama, and Peru and Bolivia (see bibliography), and a paper dealing with Surinam, Guyana and Venezuela is in press. The Ecuadoran fauna is scheduled for completion in 1999. Bill also continues to work on several Scanning Electron projects on various genera with undergraduate student workers at Mississippi College and high school teachers. (For details see Rolling Stonefly News, Vol. 8, July 1998)

---

---

**Ignac Sivec of the Slovenian Museum of Natural History**

continues to work on the fauna of Taiwan, and on a revision of *Rhopalopsole* (Leuctridae). In May, 1998, he visited Bill Stark, Riley Nelson and Stan Szczytko for a collecting trip through northern California, and in July, 1998, he visited with Du Yuzhou in China. He is also working on the genus *Perla* and various other projects.

---

---

**Mike Shaver** is a graduate student at Iowa State University working on the master's project "Survey of the Stoneflies of Iowa", under Greg Courtney. He would be interested in corresponding with anyone who has done work in Iowa or has information on previous work with stoneflies in the state.

---

---

**David Buchwalter** is a graduate student at Oregon State University, working on a project on the Deschutes River, looking at the effects of temperature on fecundity, growth and morphological features of external gills in *Pteronarcys californica*.

---

---

**J. Manuel Tierno de Figueroa** of Granada University, Spain, is collaborating with Dr. A. Sanchez-Ortega and Dr. P. Membiela, on a book of Iberian Plecoptera and other stonefly projects.

---

---

**Kay Edly** is a graduate student at the University of Illinois, working on the habitat and diet selection of the two perlid stoneflies *Acroneuria lycorias* and *Paragnetina media* at study sites in Michigan, under Steve Kohler.

---

---

**Ian McLellan** of Westport, New Zealand, has just completed a revision of *Zelandoperla* (Gripopterygidae) that is in the hands of the editor of the New Zealand Journal of Zoology, and he

continues with the on-going projects on South American material in Gripopterygidae and the systematics of a number of new species in New Zealand Notonemouridae and Gripopterygidae. He has also compiled a checklist of New Zealand Plecoptera that has been printed in the New Zealand Limnological Society's December, 1998 Newsletter. Ian has given permission for us to reprint that list in this issue of PERLA, since many of us would have difficulty in accessing the newsletter. (See separate article of this checklist).

---

---

**Dr. Kevin Alexander** of Wayne State College, Wayne, Nebraska, is working on "The Stoneflies of Eastern Nebraska", aquatic insects of the Elkhorn River and Sand Hills, and various biomonitoring projects.

---

---

**Dr. Andy Sheldon** of the University of Montana is working with Dick Baumann on the biogeography of Great Basin Plecoptera. He will be actively collecting in the spring and summer of 1999. In Montana, he has continued collecting in five neighboring drainages in the Bitterroot Mountains; an intensive faunistic project with a lot of adult material from many locations in a fairly small geographic area. In 1999 he will concentrate on filling the temporal and spatial gaps, and will apply some new analytical techniques to patterns of distribution and diversity. He has also begun life history studies of *Setvena*, *Doroneuria* and some *Isoperla* species. (Andy says he has never met a perlodid that he didn't like). The first output from this project is a paper by Hughes et al. on *Yoroperla* genetics that should appear in Freshwater Biology soon.

---

---

**Dr. Richard Baumann** of Brigham Young University is working with several colleagues, as noted here, on zoogeographic studies of: Ohio, Atlantic Canada the Great Basin. In addition his present graduate student, Ron Call, is close to completing an interesting survey of the stoneflies of Southern Utah.