BIOGRAPHICAL SKETCH Jon Kevin Gelhaus

PRESENT POSITION AND ADDRESS

Curator, Department of Entomology, Academy of Natural Sciences, Philadelphia, PA 19103-1195, (215) 299-1141, FAX: (215) 299-1028, Email: <u>gelhaus@ansp.org</u>, <u>gelhaus@gmail.com</u> Mongolia research <u>http://clade.acnatsci.org/gelhaus/;</u> Asia Center: <u>http://asia.ansp.org/index.php</u> Entomology Dept. <u>http://www.ansp.org/research/biodiv/entomology/index.php</u>

PROFESSIONAL EXPERIENCE

Curator (2008-present) - Department of Entomology, Academy of Natural Sciences. Associate Curator (1996-2007), Department of Entomology, Academy of Natural Sciences. Acting Vice President (1996-1999), Biodiversity Group, Academy of Natural Sciences. Assistant Curator (1990 - 1996), Department of Entomology, Academy of Natural Sciences. Postdoctoral Fellow (1989), Department of Entomology, Smithsonian Institution, Washington D.C.;

EDUCATION

B.S., 1978, Entomology, The University of California at Davis;M.A., 1983, Entomology, The University of Kansas.Ph.D., 1989, Entomology, The University of Kansas.

SYNERGISTIC ACTIVITIES

Developed collection databases for 11,000 primary type specimens in entomology (<u>http://clade.ansp.org/entomology/index.php</u>) historical Peale Collection of Lepidoptera (1820's-1880's) (<u>http://data.acnatsci.org/peale/</u>) and aquatic insect collections derived from ANSP's environmental surveys from 1940's to present day (<u>http://streamsurvey.ansp.org/</u>).

Have served as director and co-director since 1998 for the Academy's Research Experiences for Undergraduates Site Program in collection based research in systematics, ecology and museum studies (. <u>http://www.ansp.org/research/opportunities/reu.php</u>). Nearly 100 highly accomplished undergraduates have conduced research through this program. In addition, I was research leader directing 17 undergraduate projects from 1993-2009.

Developed an online identification key (discoverlife.org) to invasive crane fly pests in turfgrass. Key developed as part of undergraduate training (Paul Rhine) through the REU Site program. (<u>http://paul.rhine.googlepages.com/craneflyguide</u>)

Extensive training of Mongolian students and young researchers in systematics and aquatic ecology, stream biomonitoring and museum methods, including international training visits, through Mongolian Aquatic Insect Survey Project, which I direct. (<u>http://clade.ansp.org/entomology/mongolia/</u>)

Conducting identification workshops, and production of identification keys and workbook, for industry and academic professionals and graduate students in crane fly identification for environmental monitoring surveys: Washington (2000), North Carolina (2002), Salt Lake City for N.A.Benthological Soc. (2008)

President, American Entomological Society, 1997-2003, Vice President 1995-1997, Corresponding Secretary 1991-1995, Executive Council 1991- present; ANSP rep. Penn. Biological Survey (2003-2010)

Teaching adult course "An Introduction to Entomology and Related Arthropods", 8-12 session courses, as faculty, Wagner Free Institute, Philadelphia. 2002, 2003, 2005, 2007

Development and advisor to Academy public exhibits: "Butterflies Alive!" Exhibit, 1995; "In the Dark", 2001; "Spiders!" Exhibit, 1996; "Insects: Jewels of Nature", 1999; "Bugfest", 2008, 2009.

PUBLICATIONS MOST RELEVANT TO THIS PROJECT

Eberhard, W. G. and J. K. **Gelhaus**. 2009. Genitalic stridulation during copulation in a species of crane fly, Tipula (Bellardina) sp. (Diptera: Tipulidae). Revista de Biologia Tropical (International Journal of Tropical Biology) Supplement 57: 251-256.

Hayford, B. and J. **Gelhaus**. 2010. The relationship between Grazing, Erosion and Adult Aquatic Insects in Streams in Mongolia. Mongolian Journal of Biological Sciences 8(1): 27-39.

Gelhaus, J. 2009 Tipulidae (crane flies, tipúlidos) Ch. 8, pp. 193-236, IN: Brown, B. et al. (editors) Diptera of Central America. National Research Council Press.

Byers, G. W. and J. **Gelhaus**. 2008. Tipulidae, Ch. 23, pp. 763-790 in Merritt, R., K. Cummins and M. Berg (eds). *An introduction to the Aquatic Insects of North America*. Kendall Hunt, Dubuque, IA

Gelhaus, J. 2008. Manual for the Identification of Aquatic Crane Fly Larvae for North America. Prepared for North American Benthological Society Workshop, May 2008, Salt Lake City UT. 212 pp.

OTHER SELECTED PUBLICATIONS

Podeniene, V. and J. K. **Gelhaus**. 2010. The last instar larvae and pupae of Mongolian Limnophilinae from genera Eloephila, Limnophila and Phylidorea (Diptera, Limoniidae). Proceedings of the Academy of Natural Sciences 159: 185-204.

Gelhaus, J., B. Hayford, J. Morse, C. R. Nelson, Ch. Suvdtsetseg, Y. Oyunchuluun, E. Sanaa. 2008. The Mongolian Aquatic Insect Survey (MAIS): Progress and future projects, pp. 53-60 *IN* B. Boldgiv, ed. Proceedings of the International Conference, Fundamental and Applied Issues of Ecology and Evolutionary Biology. National University, Ulaanbaatar, Mongolia

Gelhaus, J. and S. Podenas. 2006. The diversity and distribution of crane flies (Insecta: Diptera: Tipuloidea) in the Hovsgol lake watershed, northern Mongolia., Chapter 18, pp. 279-303 *IN*: C. Goulden, T. Sitnikova, **J. Gelhaus**, B. Boldgiv (eds.)*The Geology, Biodiversity and Ecology of Lake Hovsgol, Mongolia*, Backhuys Publ.

Simard, L., J. Brodeur, **J. Gelhaus**, E. Taschereau and J. Dionne. 2006. Emergence of a new turfgrass insect pest on golf courses in Québec, the European crane fly (Diptera: Tipulidae). *Phytoprotection* 87:43-45.

Gelhaus, J. K. 2005. Systematics and biogeography of the desert crane fly subgenus *Tipula* (*Eremotipula*) (Diptera: Tipulidae). *Memoirs American Entomological Society* No. 46, 235 pps.

Ph.D. Advisory Committee: George Byers (chair), Charles Michener, Edward Wiley. **Postdoctoral Advisor:** Wayne Mathis.

Collaborators (last 48 months): E. Amat, B. Boldgiv, Atilano Contreras-Ramos, E. Daeschler, J. Dionne, W. Eberhard, C. Goulden, B. Hayford, H. de Jong, L. Knutson, J. Morse, C, R,. Nelson. Y. Oyunchuluun,, S. Podenas, V. Podeniene, R. Rozkosny, A. Short, L. Simard, F. C. Thompson, C. Young. Graduate Advising:

Yeakel, Amy. 1995-1997. Masters Committee (MS), External Member, Villanova University. Enkhtaivan, S, 2004-2006. MS, External Member, State Pedagological University, Mongolia.

Curriculum Vitae - Jon Gelhaus

Chuluunbat, S. 2005-2008 MS, External Member. Clemson University, Clemson, SC. Boldgiv, B. 2004-2006. Ph.D. committee, External member. University of Pennsylvania, Philadelphia, Enkhnasan, D. 2008- Ph.D. committee, external member, National University of Mongolia.