SETAC TECHNICAL WORKSHOP

Wildlife Risk Assessment in the 21st Century: Integrating Advancements in Ecology, Toxicology and Conservation

17–19 May 2021

Ecological risk assessment methods for wildlife have generally remained unchanged for decades, despite advances in ecotoxicological research methods and knowledge that could better inform risk assessments. Therefore, the Wildlife Toxicology Interest Group of the **Society of Environmental Toxicology and Chemistry** (SETAC), which is focused on promoting environmental science and management approaches and science-based decision making, is conveying a technical workshop to address limitations in current practices in the area.

The objectives of the workshop are twofold:

- To review current scientific advancements and propose improvements to all components of terrestrial wildlife risk assessment
- To identify and prioritize information gaps in need of further research

The scope for this workshop includes a priori assessment of chemical risks (e.g., new commercial chemical products, green chemistry approaches, pesticide registration) and post hoc risk assessment applications (contaminated sites, declining species and populations, emergency response, post-registration monitoring), including exposure and effects assessment, and risk characterization. The workshop will focus on issues relevant to current risk assessment frameworks used in the United States, Canada and Europe.

The organizing committee has identified current challenges and focused questions in the four components of a risk assessment: problem formulation, exposure assessment, ecotoxicology and risk characterization. The organizing committee plans to invite 45 experts to form four workgroups around those areas. The experts will be selected for their knowledge of their specific field in a manner that ensures balance in presentation from several sectors including: Academia, business, government, and non-profit from United States, Canada and Europe.

The workgroups will start deliberating during an interactive virtual seminar series held over two weeks in May 2021, which is aimed at bringing all participants, especially the wildlife ecologists, up to speed in risk assessment approaches under various programs in the above-mentioned areas. The kickoff will include a high-level summary of the risk assessment paradigm and present the nuances of major regulations. Further, stakeholders from both the regulated and regulator community as well risk assessment practitioners will be engaged to help define the challenges encountered under current processes.

Participants are expected to engage in intense objective-driven discussions, culminating in developing a series of publications that will be submitted to a peer-reviewed publication that is highly recognized in the field in the first quarter of 2022. As an interim step, the various workgroups will present their findings at the SETAC North America Annual meeting in November 2021 in open sessions to encourage feedback. They will also make draft materials available for input from any session attendee. This step is being undertaken to bring transparency to the process and allow for inclusion. The committee will incorporate the received feedback in the materials submitted for publication.

In addition, the outcomes of the workshop will be communicated to targeted audiences through a range of outlets, including presentations at scientific conferences for researchers and practitioners, fact sheets aimed at legislators and regulators, and press releases to encourage news coverage.

SETAC Technical Workshops are an ideal format for this type of work. **SETAC workshops** have a long history of bringing together environmental professionals, who advance the state of knowledge on various topics in environmental toxicology and chemistry and who work to resolve technical issues and identify solutions for pressing environmental challenges. The SETAC approach to planning and conducting workshops, which is based on SETAC's principles of multidisciplinary, multi-stakeholder engagement and science-based objectivity, is ideal for this topic.

The workshop chairs are: Beth Power, Azimuth Consulting Group; Nico van den Brink, Wageningen University; and John Elliott, Environment and Climate Change Canada. Workgroup chairs include: Mark Johnson, Army Public Health Center; Brad Sample, Ecological Risk Inc.; Christy Morrissey, University of Saskatchewan; Clementine Fritsch, Centre National de la Recherche Scientifique; Barnett Rattner, United States Geological Survey; Tom Bean, FMC; Alan Lawrence, Cambridge Environmental Assessments; and David Charters, United States Environmental Protection Agency.

The organizers are currently engaged in securing the necessary funding, which will go towards securing logistical coordination, technological resources and open access fees. If you are interested in contributing, please contact SETAC Scientific Affairs Manager, **Tamar Schlekat**.