IAEA

International Atomic Energy Agency (IAEA)

Biota Working Group

The Biota Working Group (http://www-ns.iaea.org/projects/emras/emras-biota-wg.htm) (BWG) was formed in 2004 by the IAEA as part of the Environmental Modelling for Radiation Safety (EMRAS) programme to address the gap of little validation and comparison of the different models and approaches being used and developed to estimate the radiation exposure on wildlife. The primary objective of the BWG, was: *to improve Member State's capabilities for protection of the environment by comparing and validating models being used, or developed, for biota dose assessment (that may be used) as part of regulatory process of licensing and compliance monitoring of authorised releases of radionuclides*.

For an overview of BWG activities and findings click here

BWG report

Refereed papers by the BWG

The recommendations of the BWG contributed to the establishing of three working groups considering environmental protections issues within the EMRAS II programme:

EMRAS II 'Reference Approaches for Biota Dose Assessment' Working Groups

Biota modelling group
OBJECTIVES: *The aim of the work is to improve Member States' capabilities for protection of the environment by comparing and validating models being used, or developed, for biota dose assessment (that may be used) as part of regulatory process of licensing and compliance monitoring of authorised releases of radionuclides.*

Your views required by IAEA EMRAS II Biota Modelling Group

The Biota Modelling Group is reviewing the requirements for dynamic modelling within environmental (i.e. wildlife) radiological assessments, together with an overview of available models.
To help achieve this we are consulting with colleagues using a questionnaire. If you would like to participate in the review please send your completed questionnaire to jvibatll@SCKCEN.BE.
Deadline for returning your questionnaire has now passed, thank you for your contributions.

We recognise that you may not be able to complete all components of the questionnaire (e.g. if you do not have your own model to document). However, Section D asks for your opinion on the needs for dynamic models, how fit for purpose any existing models are and what is required for (or hinders) further development and we welcome views from everybody here.

To date (January 2011) we have had 13 responses from regulators, industry and model users/developers in Europe and North America. A summary of the initial responses as presented at the January 2011 EMRAS II workshop is available here.

Refereed papers by the Biota Modelling Group

Wildlife Transfer Coefficient Handbook
OBJECTIVES: *The focus of the Working Group is to contribute to the development and implementation of an online Wildlife Transfer Parameter Database which will be applied in the production of a Technical Reports Series (TRS) Handbook on wildlife transfer parameters*. In parallel a *core group was established by the IAEA in cooperation with International Union of Radioecology (IUR) to develop an online concentration ratio database, initially populated with the ERICA data, to provide data tables for the Handbook. A further objective of the Working Group is to provide a peer review of the text of the Handbook.*

Refereed papers by the 'Wildlife transfer coefficient handbook' working group:
see REB wildlife transfer issue

Biota Dose Effects Modelling
OBJECTIVES: *The Working Group works with a number of subgroups to derive relationships between exposures to ionising radiation and effects on flora and fauna. Within this context, existing dose-effects databases will be updated, dose-response relationships will be analysed, models for the impact of exposures to populations will be attempted, the exposure to multiple stressors will be investigated and statistical methods for analysing dose-effects relationships will be further developed.*