RESRAD-BIOTA
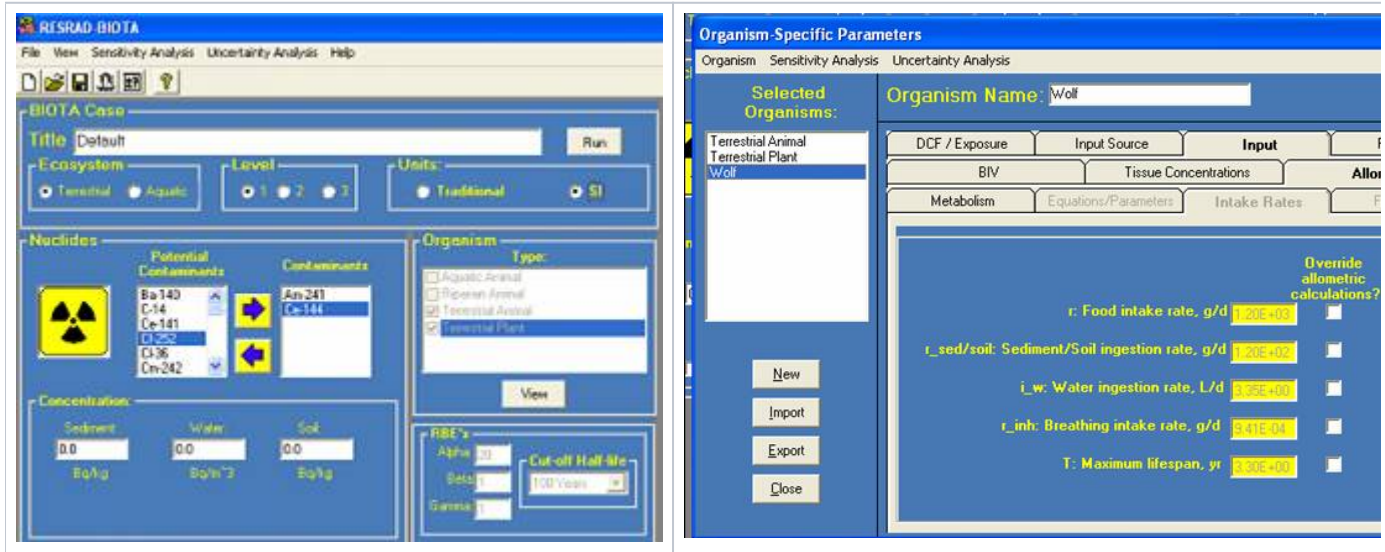
RESRAD-BIOTA

The RESRAD-BIOTA code was designed to be consistent with, and provide a tool for, implementing the US DOE Graded Approach for Evaluating Radiation Doses to Aquatic and Terrestrial Biota (terrestrial, freshwater and riparian organisms are considered). The code was developed by Argonne National Laboratory (ANL). Code and version control are currently maintained by DOE through ANL as part of the RESRAD family of codes. RESRAD-BIOTA was developed to replace the BCG (biota concentration guidelines) calculator (although the latter is still available from USA government websites it is our understanding that it will not be maintained).

RESRAD-BIOTA is available free of charge and can be downloaded from the following link.
An updated version of the code new version (V.1.5), which has probabilistic analysis capability that allows users to conduct uncertainty analysis on most input parameters, was released in December 2009.
A factsheet and user manual are available from the ANL website.
The RESRAD-BIOTA package is designed as a screening tool with, in effect, a requirement for site specific data at anything above the initial screening levels. However, the tool does contain allometric models enabling the user define transfer to terrestrial/riparian mammal and bird species of interest including the creation of simple foodchains (see What is allometry?).
The RESRAD-BIOTA code has been applied by both the code developers and independent users in intercomparison exercises of the IAEA's EMRAS programmes.
Training is available on the RESRAD packages including RESRAD-BIOTA (see the ANL website)