



Essentials of the **secr** package. Each object class (shaded boxes) comes with methods to display and manipulate the data it contains (e.g. `print`, `summary`, `plot`, `rbind`, `subset`). Detector coordinates ('traps') are stored with attributes such as detector type and usage. Detection data ('captures') are initially stored in a dataframe with one row per detection. If a habitat mask is not created manually (dashed arrow) it will be generated automatically by `secr.fit`. Any of the objects input to `secr.fit` may include a dataframe of covariates whose names may be used in a model formula. Fitted **secr** models may be further manipulated with the methods shown on the right. Additional functions (not shown) construct a regular detector array (e.g. `make.grid`) or simulate detection of a known population (`sim.caphist`).