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| Pred case | Functional response | Equations |
| 0 | Modified Holling type II, adopted from PPBIM |  |
| 1 | Modified Holling type I, adopted from PPBIM  This response has linear increase with prey density, but is capped at the maximum determined by maximum growth rate (*mum*) divided by the assimilation efficiency on live prey (which is typically highest) | if (*C·B\*prey*) > (*mum* / EpreyLIVE)  else |
| 2 | Modified Holling type III, adopted from PPBIM  Same as Holling type II, but prey biomasses are squared |  |
| 4 | Minimum-maximum  Adopted from ERSEM, where it was used to describe fish feeding. However, it is not used in ERSEM anymore, because higher trophic level predators are not currently included in ERSEM | *L* = lower prey biomass threshold for feeding by predator XX (KL\_XX)  *U*= half saturation coefficient for feeding by predator XX(KU\_XX) |
| 5 | Holling type III – size dependent  Adopted from ERSEM, where it was used to describe seabird and mammal feeding (it is not used in ERSEM anymore, see above) | VL and HT are search volume and handling time (see above). ∑B prey.i is the sum of all available prey.  Remember that for demersal species (flagdem=1), the search volume is halved |
| 6 | Ratio dependent  See Arditi and Ginzburg 1989 and text above. This approach accounts for competition among predators through ratio of predator and prey biomasses | *Compet* = interpredator competition. Please check the wiki for further details as this part of the code is changing based on discussion with experts in the field. |
| 7 | Standard Holling Type I  These are the standard Holling type responses. They have been added to Atlantis in 2015 |  |
| 8 | Standard Holling Type II  These are the standard Holling type responses. They have been added to Atlantis in 2015 |  |
| 9 | Standard Holling Type III  These are the standard Holling type responses. They have been added to Atlantis in 2015 | As in Holling Type II but the prey and total prey biomasses are squared |
| 10 | Standard Holling Type IV  These are the standard Holling type responses. They have been added to Atlantis in 2015 | As in Holling Type II but the total prey biomasses are squared |
| 11 | Hassel Varley  This response allows for interference among predators | *TP* = total predator biomass or abundance  *HVM* = is the coefficient of mutual interference for the top carnivores |
| 12 | Crowley Martin  Like Standard Holling type II but includes competition among predators as in option 6 | *Compet* = interpredator competition. Please check the wiki for further details as this part of the code is changing based on discussion with experts in the field. |