7.17 Trophic level decomposition

In addition to the routine for calculation of fractional trophic levels, a routine is included in Ecopath which aggregates the entire system into discrete trophic levels sensu Lindeman. This routine, based on an approach suggested by Ulanowicz (1995), reverses the routine for calculation of fractional trophic levels. Thus, for the example when a group obtains 40% of its food as a herbivore and 60% as a first-order carnivore, the corresponding fractions of the flow through the group are attributed to the herbivore level and the first consumer level.

The results of this analysis are presented in the *Relative flows* table under the *Trophic level decomposition* node (these are proportions adding up to 1). These proportions are converted to absolute amounts, presented in the *Absolute flows* table (t/km²/year or grams of carbon/m²/year), thus enabling the flows to be aggregated by trophic level and summarized in different ways. See <u>Flows and biomasses</u> and <u>Summary of flow data</u> for descriptions of these summaries.

Flows from detritus to the different model groups are calculated when you select the Flow from detritus menu item.