## 7.25 Ecosim network analysis indices (by Sheila Heymans)

Some network analysis indices have been extended into Ecosim.

To obtain these indices and their changes over time from Ecosim, the ?Indices? checkbox should be checked on the Ecosim Run Ecosim form.
If Network Analysis has not been invoked prior to Ecosim, a message stating ?Trophic levels not read, do Network Analysis? will be given. It is not necessary to wait for all the cycles to be calculated (which might take 24 hours), but you can press cancel to obtain the Network Analysis indices given in Ecosim.

When you click on the *Without primary production node*, Ecosim will calculate time series of the FIB index, Kempton?s Q, Total catch and Mean Trophic level of catch. A graph will appear in the *Main screen*.

A file named ?network.csv? will be saved in the same directory as the Ecopath database. This file should be renamed if you want rerun the network analysis indices, as it will also save results to the same file. The file will give the throughput (Trput), development capacity (Capacity), Ascendancy on import (Asc import), flow (Asc flow), export (Asc exp) and respiration (Asc resp), Overhead on import (Ovh import), flow (Ovh flow), export (Ovh exp) and respiration (Ovh resp), predatory cycling index (PCI) and Finn cycling index (FCI) for each monthly time step of the simulation.

When you click on the *With primary production node*, Ecosim will calculate time series of the FIB index, Kempton?s Q, Total catch and Mean Trophic level of catch, Primary production required for the catch and Detritus required for the catch.