

Run Ecosim via Console Application

This tutorial will guide you through how to make a console application that would run Ecosim and Ecospace. You can extend these to make applications such as monte carlos routines, or create/modify multiple databases.

This tutorial will extend the [EweConsoleAppExample](#) tutorial.

- i. Follow [EweConsoleAppExample](#) and ensure it runs.
- i. After step (5) (Line 21 = 'Console.WriteLine...'), add the following code to Load an Ecosim Scenario and run Ecosim with a delegate (name of a function that should be called at the end of every timestep).

```
core.LoadEcosimScenario(1) ' (6) Loads an ecosim scenario
core.RunEcoSim(AddressOf EcosimResultsHandler) ' (7) Runs Ecosim with delegate
```

- i. Add the following code after the sub routine End Sub which is the function that you defined in step (7). The following sub routine will print the biomass of group 1 at every timestep.

```
' Ecosim delegate - a sub function/subroutine that is
' called at the end of every timestep.
' One would obtain the results from the results object.
Private Sub EcosimResultsHandler(ByVal iTime As Long, ByVal EcoSimResults As cEcoSimResults)
    System.Console.WriteLine("Time Step = " & iTime.ToString & _
        "; Biomass of group 1 = " & EcoSimResults.Biomass(1).ToString & vbCrLf)
End Sub
```

- i. Hit F5 or in the menu, Debug>Start Debugging. You should get the following output.

```
Time Step = 320; Biomass of group 1 = 0.993543
Time Step = 321; Biomass of group 1 = 0.9935352
Time Step = 322; Biomass of group 1 = 0.9935276
Time Step = 323; Biomass of group 1 = 0.99352
Time Step = 324; Biomass of group 1 = 0.9935125
Press a key to exit
```

The .vb file can be found at the bottom of this page. Simply replace this file with the Ewe7.vb found in the [EweConsoleAppExample](#) tutorial.