// FuncResponse param file, CourseWare 0.2, vfb, 981130

// CourseWare 0.3, vfb, 990303

// ParamVerbose

Globals {

courseware.util.CourseWareApplet cwa;

cwa.setBackground( 204,204,204 );

cwa.setCommentRows(2);

module: cwa.setModuleToRun(" "), "moduleToRun"; // 2 diff modules here

cwa.setLogo( "crocIcon.jpg",

"http://www.eeb.yale.edu/faculty/schmitz/commecollabs.html",

98, 50 );

cwa.setReader ( "Discussion", "eco/iso/readers.func/discussion.html" );

cwa.setReader ( "Questions", "eco/iso/readers.func/questions.html" );

cwa.setReader ( "Details", "eco/iso/readers.func/underhood.html" );

cwa.setReader ( "Homework", "eco/iso/readers.func/homework.html" );

cwa.setReader ( "References", "eco/iso/readers.func/refs.html" ) ;

}

Scenario ("Functional Response") {

courseware.plot.PlotModule plot;

module: cwa.setModuleToRun("courseware.plot.PlotModule"), "moduleToRun";

cwa.comment("Compare functional responses.");

plot.setSteps(101);

ParamList ("Plot Limits", "plot.resetRange") {

plot.setXmax(1000.0), "Prey : ";

plot.setYmax(50), "Functional Response : ";

}

plot.makeButton("Plot Limits");

// these are for CourseAwareAdapter's superclass palette

plot.makePalette( 10, 0 );

plot.keepPalette(); // this palette for all scenarios

plot.makePaletteButton( "Colors", 1 );

plot.setXAxisLabel("Prey");

plot.setYAxisLabel("Functional Response");

// and the function

plot.addFunction( "Type I Response", "eco.iso.TypeIResponse" );

plot.addFunction( "Type II Response", "eco.iso.TypeIIResponse" );

plot.addFunction( "Type III Response", "eco.iso.TypeIIIResponse" );

eco.iso.TypeIResponse t1; t1.setArgs(".05");

eco.iso.TypeIIResponse t2; t2.setArgs(".05 .02");

eco.iso.TypeIIIResponse t3; t3.setArgs(".05 .02");

}

ParamList("IsoParams") {

eco.iso.Isoclines iso;

eco.iso.IsoPlot2D plot;

module: cwa.setModuleToRun("eco.iso.Isoclines"), "moduleToRun";

cwa.comment("Add trajectories to predator/prey system.");

plot.setTimeLabel( 1, "Population" );

plot.setTimeLabel( 0, "Time" );

plot.setStateLabel( 0, "Prey" );

plot.setStateLabel( 1, "Predator" );

ParamList ("Time", "iso.rerun") {

iso.setMaxTime(50.0), "run to time";

iso.setDt(.005), "dt approximation";

iso.setPlotNth(10), "plot nth";

}

iso.makeButton("Time");

steps: iso.setIsoSteps(2);

}

Scenario ("Linear Codependent") {

eco.iso.LinearCodep sys; // note different sys each scenario

insertList("IsoParams");

cwa.comment("Linear Codependent.");

iso.setSystem( "LinearCodep", "eco.iso.LinearCodep", "0.5 0.05 0.5 0.5" );

iso.addTrajectory( "10,10", 10.0, 10.0 );

sys.setDt(.005);

sys.setPlotNth(10);

}

Scenario ("Saturated Predator") {

eco.iso.SatPred sys;

insertList("IsoParams");

cwa.comment("Saturated Predator.");

iso.setSystem( "SatPred", "eco.iso.SatPred", "0.5 0.05 0.5 0.5 .001" );

iso.addTrajectory( "10,10", 10.0, 10.0 );

sys.setDt(.005);

sys.setPlotNth(10);

}

Scenario ("Saturated Predator, Logistic Prey") {

eco.iso.SatPredLogPrey sys;

insertList("IsoParams");

cwa.comment("Saturated Predator, Logistic Prey.");

iso.setSystem( "SatPredLogPrey", "eco.iso.SatPredLogPrey",

"0.5 0.05 0.5 0.5 .001 70" );

iso.addTrajectory( "10,10", 10.0, 10.0 );

sys.setDt(.005);

sys.setPlotNth(10);

}

Scenario ("Fighting Saturated Predator, Logistic Prey") {

eco.iso.FightSatPredLogPrey sys;

insertList("IsoParams");

cwa.comment("Fighting Saturated Predator, Logistic Prey.");

iso.setSystem( "FightSatPredLogPrey", "eco.iso.FightSatPredLogPrey",

"0.5 0.05 0.5 0.5 .001 70 .05" );

steps: iso.setIsoSteps(31);

iso.addTrajectory( "10,10", 10.0, 10.0 );

sys.setDt(.005);

sys.setPlotNth(10);

}