// LottkaV param file, CourseWare 0.2, vfb, 981120

// CourseWare 0.3, vfb, 990303

Globals {

courseware.util.CourseWareApplet cwa;

eco.iso.Isoclines iso;

eco.iso.IsoPlot2D plot;

eco.iso.LotkaVFn sys;

cwa.setBackground( 204,204,204 );

cwa.setCommentRows(2);

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

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

cwa.setLogo( "crocIcon.jpg",

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

98, 50 );

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

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

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

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

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

plot.setTimeLabel( 1, "Population" );

timeLabel: plot.setTimeLabel( 0, "Time" );

plot.setStateLabel( 0, "N1" );

plot.setStateLabel( 1, "N2" );

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

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

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

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

}

iso.makeButton("Time");

iso.setIsoSteps(2);

show: iso.setShowIsoclines(false);

system: iso.setSystem( "LotkaVolterra", "eco.iso.LotkaVFn",

"0.4 100.0 0.8 0.4 50.0 1.5" );

iso.addTrajectory( "150,150", 150.0, 150.0 );

}

ParamList ("Case A") {

// species 1 r, K, effect2on1, species 2 r, K, effect1on2

system: iso.setSystem( "LotkaVolterra", "eco.iso.LotkaVFn",

"0.4 100.0 0.8 0.4 50.0 1.5" );

timeLabel: plot.setTimeLabel( 0, "Time: CaseA" );

}

Scenario ("Q1 Case A") {

insertList("Case A");

cwa.comment("Q1 Case A, no isoclines.");

}

ParamList ("Case B") {

// species 1 r, K, effect2on1, species 2 r, K, effect1on2

system: iso.setSystem( "LotkaVolterra", "eco.iso.LotkaVFn",

"0.4 100 0.8 0.4 130 1.5" );

timeLabel: plot.setTimeLabel( 0, "Time: CaseB" );

}

Scenario ("Q1 Case B") {

insertList("Case B");

cwa.comment("Q1 Case B, no isoclines.");

}

ParamList ("Case C") {

// species 1 r, K, effect2on1, species 2 r, K, effect1on2

system: iso.setSystem( "LotkaVolterra", "eco.iso.LotkaVFn",

"1.25 100.0 0.6 1.25 130.0 0.6" );

timeLabel: plot.setTimeLabel( 0, "Time: CaseC" );

}

Scenario ("Q1 Case C") {

insertList("Case C");

cwa.comment("Q1 Case C, no isoclines.");

}

Scenario ("Q2 Case A") {

insertList("Case A");

cwa.comment("Q2 Case A, with isoclines.");

show: iso.setShowIsoclines(true);

}

Scenario ("Q2 Case B") {

insertList("Case B");

cwa.comment("Q2 Case B, with isoclines.");

show: iso.setShowIsoclines(true);

}

Scenario ("Q2 Case C") {

insertList("Case C");

cwa.comment("Q2 Case C, with isoclines.");

show: iso.setShowIsoclines(true);

}

ParamList ("Case ?") {

eco.iso.MutualLVFn sys;

// species 1 r, K, effect2on1, species 2 r, K, effect1on2

system: iso.setSystem( "MLotkaVolterra", "eco.iso.MutualLVFn",

"0.4 100 0.8 0.4 130 1.5 2 3" );

timeLabel: plot.setTimeLabel( 0, "Time: Case???" );

}

Scenario ("???") {

insertList("Case ?");

cwa.comment("Mystery case ???, no isoclines.");

}