Figure 2 - Bifurcation diagram for the logistic system. As the 'r' value increases the behavior becomes more complex, and more unpredictable. At 'r' values less than ~3.0 the system attenuates to a point attractor; that is, descends to equilibrium. At 'r' values between 3.0 and ~3.5 the system behaves as a limit cycle attractor, oscillating between 2, 4, 8, etc. population values. Above 'r' 3.5 systems becomes deterministically chaotic, behaving as a strange attractor.