

Population biology date assignment



This lab has instructions on the left-hand side and also contains pages to enter data and questions. You may answer all Journal questions and data tables (including the graphing assignment) directly on the computer and “print” here responses OR you can print this assignment and write all responses by hand.

Data Table P. aurelia grown alone, cells/mL P. caudatum grown alone, cells/mL P. aurelia grown in mixed culture, cells/ mL P caudatum grown in mixed culture, cells/mL Day 0 2 Day 2 10 8 12 Day 4 56 Day 6 92 52 62 18 Day 8 108 16 Day 10 Day 12 Day 14 Day 16 Journal 1 . What are the objectives for this experiment? (you can summarize) 2. Make a hypothesis about how you think the two species of Paramecium will grow lone and how they will grow when they are grown together. . Explain how you tested your hypothesis. 4. On what day did the Paramecium caudatum population reach the carrying capacity of the environment when it was grown alone? How do you know? 5. On what day did the Paramecium aurelia population reach the carrying capacity of the environment? How do you know? 6. Explain the differences in the population growth patterns of the two Paramecium species.

What does this tell you about how Paramecium aurelia uses available resources? 7. Describe what happened when the Paramecium populations were mixed in the same test tube. Do the results support the principle of competitive exclusion? (You may need to briefly explain competitive exclusion.) 8. Explain how this experiment demonstrates that no two species can occupy the same niche. Publisher: Biologycorner. com; Please include a WHAT I SEE, WHAT IT MEANS for this graph.