

Curriculum Features

Within each unit there is a series of Sections containing several Lessons. Each Lesson is based upon a learning goal that guides what students are learning. Every lesson prepares students for the unit Challenge in which students prepare a solution to an environmental challenge and argue in support of their solution drawing on all information presented in the unit. Although the Challenges are introduced in the beginning of the units and referred to in each lesson, their completion as final projects at the end of the units serves as a performance assessment for each unit.

Other features of the Biocomplexity curriculum include:

- **Readings**

Many lessons have short readings associated with them. They are intended to take students to a deeper level of understanding of the topics under investigation in the lesson.

- **Investigation Protocols**

Protocols are supplied when students perform field or lab investigations or learn new technology applications. They are placed after the lessons in each unit so they can be used and referenced when needed.

- **Unit Reviews**

Students can review the key learning goals of the unit, as well as use multiple choice and short answer assessment questions for review.

- **Blackline Masters**


You will find copies of the tables and charts and other student materials at the back of the Teacher Guide.

- **Glossary**


A glossary of terms is provided at the end of the curriculum.

- **Biocomplexity Website**

Teachers can find copies of the curriculum materials, links that provide additional resources, examples of student work, as well as video clips and datasets for student use in all four units.

 **Reading: Suburban Sprawl**

Every year an area of land roughly the size of Connecticut, about 3 million acres, is converted from natural forest, grassland, and farmland into housing developments. Of all the land developed in our nation's history up to 1999, almost one-sixth of it was developed in the last decade. Suburban development is taking over farmland and natural areas. Although you might think this explosive growth is caused by human population growth alone, other factors also play an important part.



Between 1950 and 1990, the U.S. population grew by 92.3 percent but the amount of urban and suburban land increased by 245.2 percent. Between 1945 and 1992, about half an acre was developed per person in the United States. This figure more than doubled to 1.2 acres per person for the period from 1992 to 1997. This figure includes all the new development — residential housing, commercial and industrial concerns, and roadways.