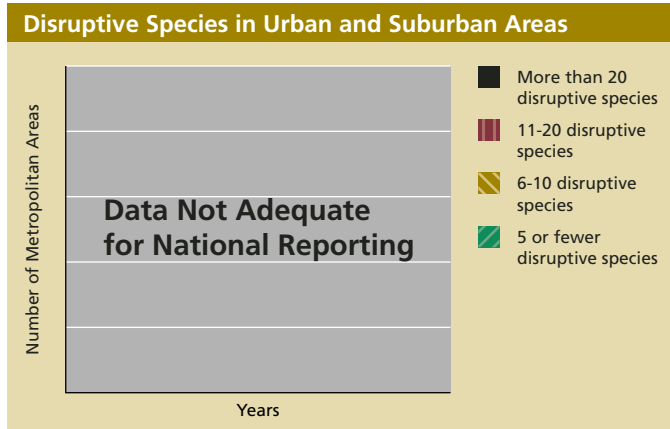




Urban and Suburban Areas

SYSTEM DIMENSIONS	CHEMICAL AND PHYSICAL	BIOLOGICAL COMPONENTS	HUMAN USES
Extent Pattern	Nutrients, Carbon, Oxygen Contaminants Physical	Plants and Animals Communities Ecological Productivity	Food, Fiber, and Water Recreation and Other Services

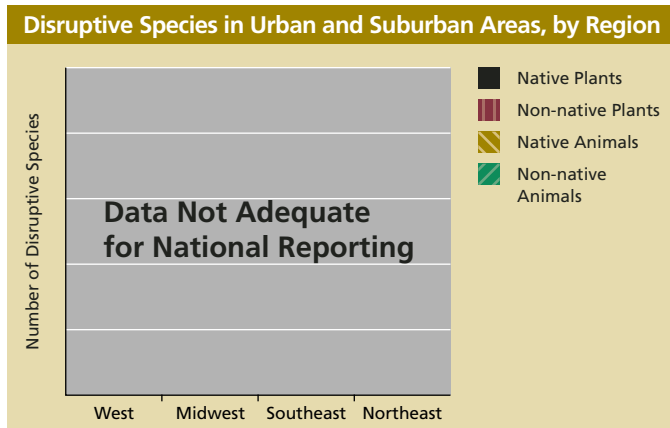
⊖ Disruptive Species



What Is This Indicator, and Why Is It Important?

This indicator would report the number and type of “disruptive” species found in metropolitan areas. Disruptive species are those that have negative effects on natural areas and native species or cause damage to people and property. Specifically, the indicator will report the number of larger metropolitan areas with 5 or fewer, from 6 to 10, from 11 to 20, and more than 20 disruptive plant and animal species. It would also report the number of disruptive native and non-native plant and animal species on a regional basis, for the most current year.

Some species of plants and animals are so abundant in urban and suburban areas that they disrupt other species and cause problems for people. In the Northeast, for example, white-tailed deer are major suburban pests. They damage native vegetation in natural areas, destroy crops and gardens, and are involved in countless automobile accidents. In and around Portland, Oregon, Scotch broom, native to the British Isles, is spreading rapidly, often growing in dense, nearly impenetrable clusters that make maintenance of roads, ditches, canals, and power and telephone lines difficult and costly. Minneapolis, among other cities in the Midwest, is taking action against disruptive woody plants like buckthorn, Tartarian honeysuckle, and mulberry, which are taking over the city’s woods and wetlands.



Why Can’t This Indicator Be Reported at This Time? Regional lists of disruptive species do not exist. Creating them requires definition of thresholds that distinguish truly disruptive species from those that cause fewer problems, as well as consistent policies for including species based on their potential to cause damage, as shown by experiences in other locations.

In addition, monitoring and reporting programs need to be put in place to track the occurrence of disruptive species. Many knowledgeable individuals and institutions could participate, but no entity currently has the mandate to coordinate such an activity.

Discussion Disruptive species may be native, or they may have been introduced from other regions or other countries. The altered landscape in urban and suburban areas encourages the growth of these species, which tolerate and even thrive around built-up areas. At the same time, populations of more sensitive species shrink, reducing competition and further encouraging the spread of disruptive species.

There is no technical note for this indicator.