

THINKING CRITICALLY**● Doomed Dunes?**

Coasts are very dynamic environments. The changing tides, wind erosion, storms, and human traffic are some of the things that work to shape the coasts. Beach dunes are extremely sensitive to erosion from wind and human activity. Strong winds blowing from the ocean to the coast cause the dunes to migrate inland. People traveling over the dunes on foot and by vehicle stir up the sand and make it easier for the wind to transport it. If left unprotected, the dunes would surely be destroyed.

Many different plans for protecting dunes have been proposed and put into practice. Communities often prohibit people from walking, playing, or driving on beach dunes.

Another protection plan in use today is aimed at preventing wind erosion of the dunes. Some beach communities have begun planting grasses and burying old Christmas trees in front of dunes. The grasses and trees are set parallel to the dunes to form a protective wall between the dunes and the ocean.

Your Turn to Think

1. In addition to providing a protective wall, grasses and old Christmas trees can also help in the formation of dunes. Describe how this might happen.
2. Dunes are also eroded by the ocean during storms. How do grasses and old Christmas trees protect the dunes during storms?
3. Beaches are areas of limited sand supply. If the wind is causing the sand to migrate toward the land, how does a beach keep from losing all of its sand?
4. Which type of barrier, grasses or old Christmas trees, is better suited for the beach environment? Explain your answer.
5. Why would people use the other type of barrier if it is not suited for a beach environment?