



**Figure IV-2-10. Partly vegetated coastal sand dunes. Rhizomes help hold sand in place and colonize the dune grasses. Eastern Alabama on the Morgan peninsula east of the mouth of Mobile Bay (March 1991). This area was devastated by Hurricane Frederic in 1979 and is slowly recovering. Commercial construction now threatens these dunes**

*e. Dune vegetation.* American beach grass (*Ammophila breviligulata*) is the most common dune plant in the United States northeast and on the west coast. Along the Gulf coast and the southeast, sea oats (*Uniola paniculata*) is the most abundant species on the dunes. Both plants are remarkably adapted to this environment and are essential to dune stability. They are tolerant of salt spray and occasional inundation by salt water. Growth is stimulated by sand burial, which occurs frequently on the dune. The plant leaves help trap sand on the dune by raising the laminar boundary layer of the wind velocity profile and causing eolian deposition. Regrowth occurs even after rapid deposition of sand up to 1 m thick. Plant growth is by seed and by rhizome extension. Rhizome extension allows rapid plant distribution to help stabilize the surface of the