Coachella Valley Sand Dune Ecosystem Facts

What is the Coachella Valley sand dune ecosystem?

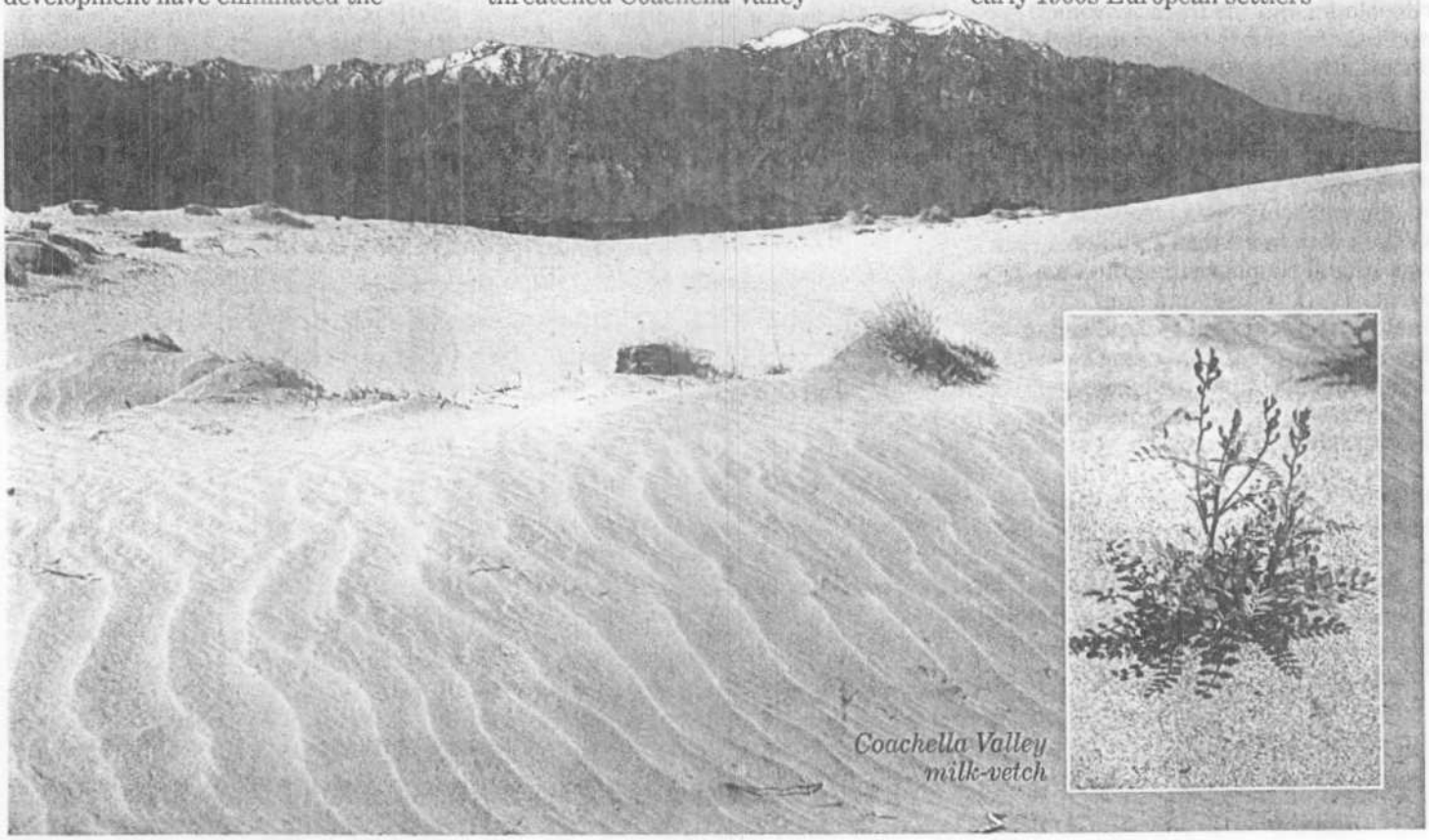
The Coachella Valley is located at the northern extension of the Colorado Desert and is bordered by the Salton Sea to the south and the Little San Bernardino Mountains to the north. Sand that washes down drainages during flood events accumulates at the bottom of the drainages, then is dispersed throughout the Valley by the continual high winds that blow through the area. This ever-shifting sand forms a complex system of sand dunes that support a variety of native desert species. Originally, about 270 square miles of the Coachella Valley may have been covered with loose, wind blown sand. Disruption of the sand transport corridors and the impacts of development have eliminated the majority of the historic "blowsand habitat" in the Coachella Valley. The total remaining "blowsand" habitat is about 50 square miles in size and occurs in relatively fragmented patches from San Gorgonio Pass southeast through the Valley to Indio, California.

Why is the sand dune ecosystem important?

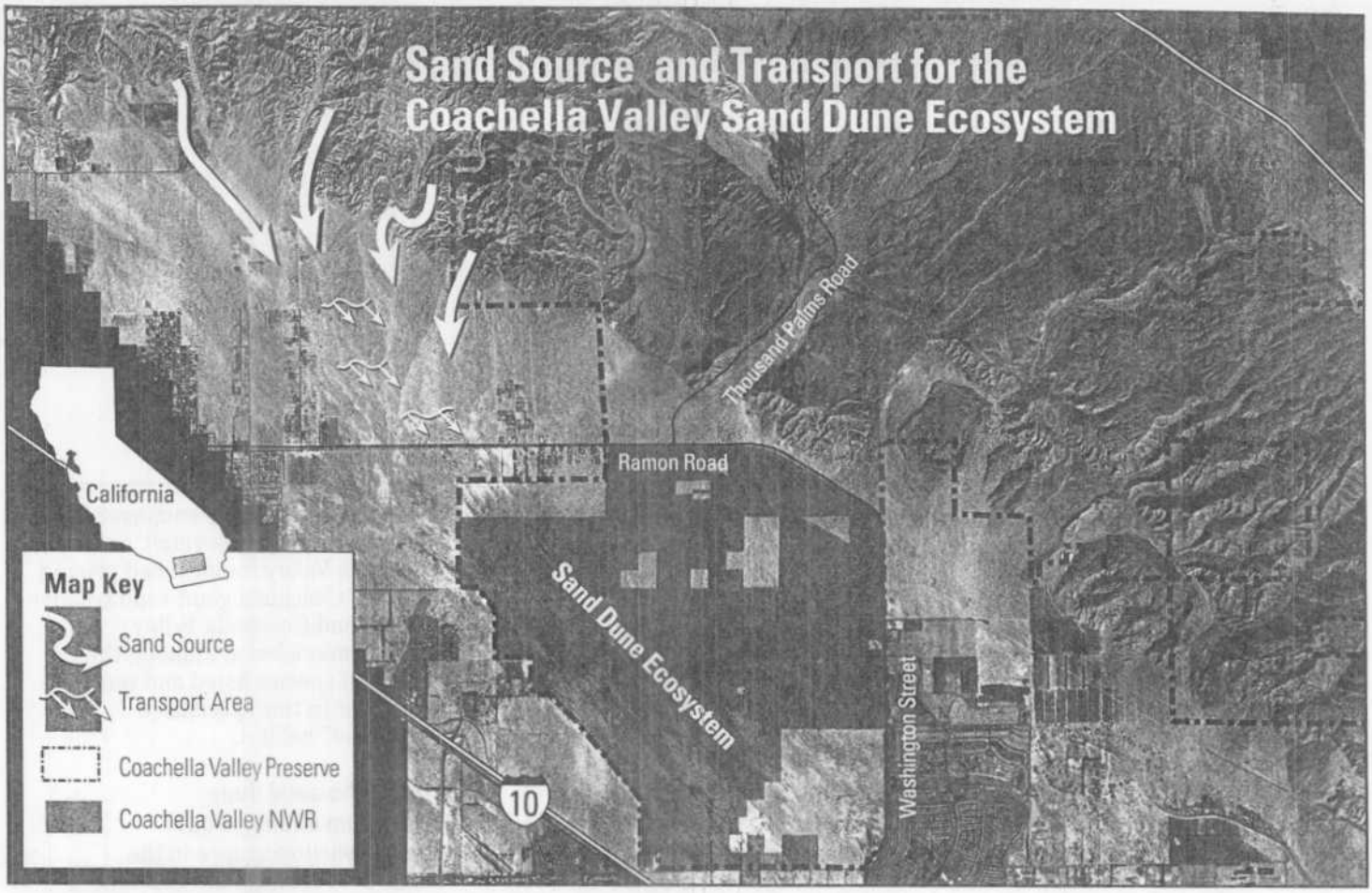
The sand dune ecosystem of the Coachella Valley supports a variety of animals and plants specially adapted to living in the harsh desert environment. These distinct and sometimes rare species have evolved because the blowsand deposits of the Valley are relatively isolated from other areas by the surrounding mountain ranges. The threatened Coachella Valley fringe-toed lizard, the endangered Coachella Valley milk vetch, and Coachella Valley round-tailed ground squirrel, Coachella giant sand treader cricket, and Coachella Valley Jerusalem cricket are among the variety of species listed and sensitive that occur in this specialized "blowsand" habitat.

Why is the sand dune ecosystem endangered?

From prehistoric times to the nineteenth century, the Cahuilla Indians were the sole inhabitants of the Coachella Valley. As a hunter-gatherer society, the Cahuilla established a number of permanent and semi-permanent settlements within the Valley. Beginning in the early 1900s European settlers



Sand dune habitat at Coachella Valley



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established routes of travel through the Valley and erected permanent settlements. Agriculture, housing developments, off-highway vehicle recreation, and the introduction of non-native, invasive plant species (tamarisk) have resulted in the direct loss of sand dunes and interruption of the natural sand transport corridors. Today more than 100,000 people permanently reside in the Coachella Valley with more than 1 million additional people visiting the area each year. By 2010 the number of permanent residents is expected to double. The continuing development of the Coachella Valley will have significant effects on the long-term sustainability of "blowsand" habitat of the Coachella Valley.

Without a concerted effort to conserve the habitat in the near future, the remaining habitat will be come increasingly fragmented. Shielded and degraded, this rare ecosystem could disappear entirely as soon as 50 years from now.

What is being done to save the sand dune ecosystem?

The U.S. Fish and Wildlife Service is initiating a planning effort with Federal, tribal, state, and local partners to look at alternative means to protect the sand source and transport areas required to maintain the "blowsand" habitat of the Coachella Valley.

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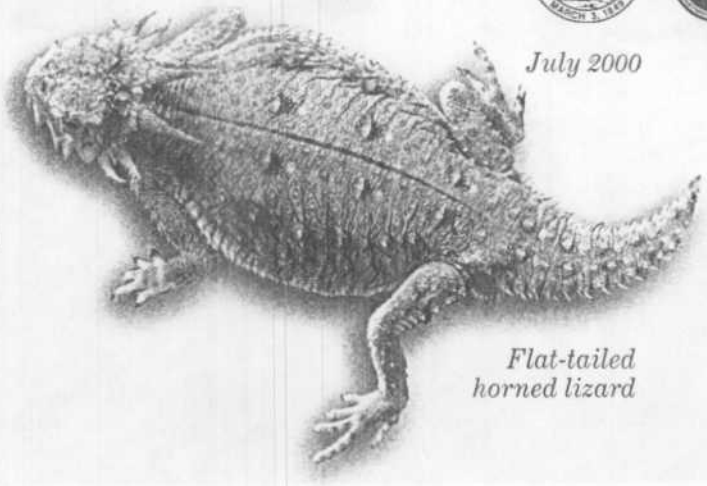

Flat-tailed horned lizard