

## **Flora, Fauna, and Other Fun on the Sand Dunes**

At first glance the Tottori sand dunes appear to be a vast expanse of barren sand. With some 200 centimeters of annual rainfall, however, in fact they support a surprising amount of life. Strong winds and blowing sands, limited fresh water, and wildly fluctuating temperatures (surface temperatures can exceed 50 degrees Celsius in the summer) make for a harsh environment, but rainfall that seeps into the sand supports vegetation and, in turn, insects and even animals such as rabbits, foxes, deer, and wild boars.

As you walk the dunes, keep an eye out for flowering plants, insect nests, and the telltale paw prints and tracks of those who call this place home. More than a few species of plant and insects found here appear on the national and prefectural red lists as endangered or threatened. Respect them and their habitat and tread carefully.

After the sedges of mid-April, aster and beach morning glory are among the first plants to herald the arrival of spring. June brings glehnia, heliotrop, and creeping zoysia grass; July and August flourish with beach wedelia, round-leaf vitex, and still more species of sedge. September closes out the blooming season with daisies and toadflax. Shore junipers and black pines are found in areas where the dunes are more settled, the sands less shifting.

The constantly moving landscape offers few steady places to hide, but insects and animals have adapted to this coastal environment in their own ways. Indeed, the very names of the insect species found here—antlion, wolf spider, tiger beetle, sand wasp, etc.—suggest the tenacity required to live on the sand dunes.

The antlion's strategy for catching prey is to sculpt sloping sides that funnel into its nest. When prey falls in, the antlion covers it in sand to trap it. The wolf spider, meanwhile, reinforces its vertically excavated nest with webbing, and even puts trip wires outside its hole to notify it when prey is near. There are two species of tiger beetles on the dunes. These insects, whose markings resemble camouflage wear, bore vertical nests into the sand that can be spotted from late June to September. Look for the entranceway—a tiny hole 1 to 3 millimeters wide. Adults of the two species are 1 and 1.5 centimeters long, respectively. The larger of the two, is, sadly, endangered here on the Tottori sand dunes and across many of its habitats in Japan. Nonetheless you can

find it and even photograph it rather easily, as the beetle characteristically moves a few meters away when approached and then stops before scurrying away again. For this reason one of its common Japanese names is *michioshie*, or “guide,” as it appears to be showing the way.

For the more actively inclined, sandboarding, paragliding, fat bike touring, yoga and SUP yoga, and Segway rides are a few of the organized sports that can be experienced right on the dunes. Stop by or call the Visitor Center to make arrangements.