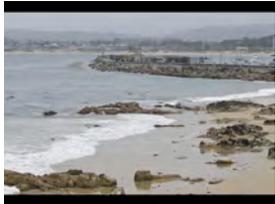


Down the Hatch: Star-eating Gulls in Monterey, California

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Monterey, California. Breakwater where gulls eating sea stars were photographed.



Gull exploring specimen of *Pisaster giganteus* as potential meal.



Gull with specimen of *P. giganteus* in its mouth.



Going down.



Another going down.



Even juvenile gulls like sea stars.



And down it goes.



I ate the whole thing.



One going down, two to go.



Gull pecking overturned specimen of *P. ochraceus*.



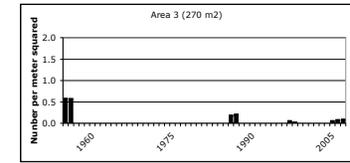
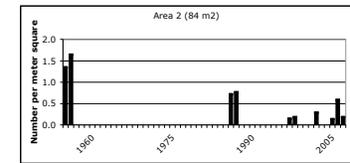
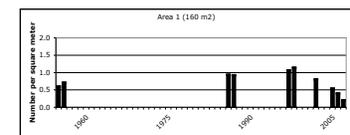
Two gulls pecking an overturned star.



All pecked out.



Gull checking out specimen of *Patiria miniata*.



Densities of *P. ochraceus* at three areas off Hopkins Marine Station, about 2 km from the breakwater. Gull densities decreased markedly in the 1990s.

We present photographs documenting Western gulls (*Larus occidentalis*) swallowing whole sea stars on the breakwater of Monterey, California. In all cases, the prey were adult individuals of *Pisaster giganteus*, a predominately subtidal species that is occasionally exposed at low tides. Although individuals of the more abundant, predominately intertidal species, *P. ochraceus*, were often seen overturned with their ambulacral system pecked clean, none were recorded being eaten whole. Specimens of *Patiria miniata* were also photographed overturned by gulls, but their ambulacra were not pecked clean. Gulls swallowing whole specimens of the predominately subtidal *Pisaster brevispinus* have also been seen elsewhere in Monterey Bay (JSP). In addition, gull predation on a variety of intertidal sea stars has been reported for many places and is not uncommon (Google: gull predation sea stars starfish). The impact of gull predation on sea star populations has never been carefully studied. Nevertheless, the recently documented decline of intertidal sea star populations at sites in Monterey Bay may result, in part, from gull predation (see figure above; from Pearse, JS, McClintock, JB, Vicknair, KE, Feder, HM. in press. Proceedings International Echinoderm Conference, Durham, New Hampshire, 2006.)