

## Four Sisters Coastal Herbfield

At a glance (last updated: January 2017)			
TRC reference:	BD/9497	National priorities:	1, 2, 3, 4
Other reference:	QEII 5/06/279 RAP 45 (in part)	Ecological district:	Foxton
Land tenure:	Private	LENZ environment:	J4.2a (3.3 ha)
GPS:	1721399E – 5601429N		
Area:	3.3 ha	Protection status:	A, B, C

### Location

The Four Sisters Coastal Herbfield covenant is located on privately owned land, 3.5 km south west of Kakaramea. The coastal covenant is part of the Kakaramea Powerhouse Cliffs RAP and lies in the Foxton Ecological District within the Kaikura Stream catchment.

### General description

The KNE area is roughly 3.3 hectares in size and consists of coastal herbfields on the cliff face and in boggy areas along the cliff tops. The herbfields are nationally important in that they contain a high number of rare and uncommon plant species. It is the best representative area of original cliff edge vegetation in the Foxton Ecological District and is the only sizable natural sand plain on the cliff edge north of Whanganui. The cliffs reach 25 metres in height and extend out to sea in a series of fingers.

### Ecological features

#### Vegetation

The coastal herbfield vegetation consists predominantly of turf plants. Of particular note is the presence of the dicotyledonous herbs *Limosella* (*Limosella 'manutahi'*) and button daisy (*Leptinella dispersa subsp. rupestris*), which are both identified as 'Threatened, Nationally Critical'. Sand gunnera (*Gunnera arenaria*) is also present and is listed as 'At Risk, Declining'. Other native plants present include ice plant (*Disphyma australe*), New Zealand celery (*Apium prostratum subsp. prostratum var. filiforme*), prickly couch (*Zoysia minima*), sea primrose (*Salmolus repens var. repens*) and colobanthus (*Colobanthus muelleri*).

### Fauna

The herbfield will contain a diverse range of terrestrial invertebrates which may include notable species. The native seashore earwig (*Anisolabis littorea*) is present. Sea birds such as the Southern black-backed gull (*Larus dominicanus*) also roost and nest along the coastal cliff edge in this area.

### Ecological values

Ecological values	Rank	Comment
Rarity and distinctiveness	High	Contains <i>Limosella</i> ( <i>Limosella 'manutahi'</i> ) and button daisy ( <i>Leptinella dispersa subsp. rupestris</i> ), which are both identified as 'Threatened, Nationally Critical'. Sand gunnera ( <i>Gunnera arenaria</i> ) is also present and is listed as 'At Risk, Declining.
Representativeness	High	Remnant indigenous vegetation on J4.2a 'Acutely Threatened' LENZ environment.
Ecological context	High	The best representative examples of original cliff edge vegetation in the Foxton Ecological District.
Sustainability	Positive	In relatively good vegetative condition despite edge effects. Key ecological processes still influence the site. Under appropriate management, it can remain resilient to existing or potential threats.

### Management threats and response

Potential and actual threats to the sustainability of the Four Sisters Herbfield's ecological values are as follows:

Threats to ecological values	Level of risk	Comment
Invasive animals	Medium	Rabbits, hares, possums, hedgehogs and rats.
Weeds	High	Pasture grass and occasional gunnera.
Habitat modification	High	An unusual situation where grazing with stock is beneficial to reduce pasture grass weed invasion.

Site protection measures addressing potential threats and actual threats are as follows:

Site protection	Yes/No	Description
A	Yes	QEII covenant
B	Yes	General regional or district rules might apply for activities impacting on the site
C	Yes	Fenced (but controlled grazing is occurring).

