

1. Current Status

1.1 Description

The sandhill rustic moth (*Luperina nickerlii*) is found in young sand dunes, usually where they are lapped by the highest tides. It has a wingspan of around 32-42mm and is mostly pale grey in colour with a complex but subtle pattern on the forewings and clear white hindwings. The adults lay their eggs in the sheaths of sand couch grass (*Elytrigia juncea*) in August and September and the larvae hatch out two to four weeks later. After hatching the caterpillar bores into the crown of the plant reaching its base by spring. They continue to feed within the base of the plant, transferring to the roots as they grow larger, until July when they pupate a few centimetres below the ground. The adults emerge in August and September, hiding in the dunes during the day. In the first half of the night adults can be found sitting on sand couch stems and later in the night they take to the air in order to feed, mate and lay eggs.



Ilija Vukumanovic

English Name:
Sandhill Rustic Moth

Scientific Name:
Luperina nickerlii

1.2 Population and Distribution

United Kingdom/Wales

There are four sub-species of sandhill rustic occurring in the British Isles. One occurs locally in East Anglia; another occurs locally on the Dingle peninsula in Ireland; and one is confined to a single site in Cornwall. The sub-species found in North Wales and North-West England (*ss. gueenei*) and is found at one site on the Wirral, one site in Merseyside and sites in Flintshire and Denbighshire. It is also found in parts of Anglesey and Conwy.

Conwy

In Conwy the sandhill rustic has recently been discovered at one site where it is present in very low numbers, probably no more than a few individuals being encountered in any one night during the flying season.

1.3 Legal status

Apart from the general provisions of the Wildlife & Countryside Act 1981, the sandhill rustic moth is not specially protected by European or British legislation.

1.4 Priority status

- UKBAP Species of Conservation Concern
- Local Priority Species
- IUCN RDB - Vulnerable



2. Factors causing loss or decline

- Trampling of young dunes by recreational activities can seriously deplete the amount of habitat useable by the sandhill rustic.
- Beach engineering works can both destroy existing habitat and prevent the natural development of young dunes.
- Offshore dredging may limit the amount of sand deposited on the beach so the natural erosion of sand from the strandline and seaward dune edge is not replenished resulting in the eventual loss of the habitat.
- Natural successional changes in the vegetation of young dunes.
- Collection of moth specimens by unscrupulous lepidopterists can have a serious effect on small populations.
- Global climate change may cause the increased incidence of storm waves that can destroy young dune habitat. Also the species may be lost in the future as it becomes trapped between rising sea levels and unsuitable habitat further inland.

3. Current action

UK/Wales

- NMGM and CCW are establishing a Common Standards Monitoring Method for this species, which should be transferable to other sites.

Conwy

- This species was first discovered in Conwy in August 2001 and will be monitored annually by Butterfly Conservation.

4. Objectives

1. Protect, maintain and enhance the current population.
2. Increase the total amount of habitat useable by the sandhill rustic.
3. Raise awareness of biodiversity in Conwy County Borough.
4. Undertake all necessary research and monitoring.



5. Links to other plans

Coastal sand dune HAP
Coastal vegetated shingle HAP
CCBC Countryside Strategy
CCBC reserve management plans
Adjacent LBAPs (Denbighshire)

6. Sources of information

Principal authors: Ian Wallace (Liverpool Uni.), Adrian Lloyd Jones (CCBC/NWWT)
UK lead partner: None (not a UKBAP Priority Species)
Local lead partner: Butterfly Conservation/CCBC

- Cheshire Species Action Plan for Sandhill Rustic Moth (2002)

7. Proposed Actions - Sandhill Rustic Moth			
7.1 Policy and Legislation	Objective	Partner	Target
7.1.1 Ensure that the species is fully protected through the planning system.	1	CCBC	From 2003
7.1.2 Monitor the extent of criminal activity relating to the species encouraging compliance with legislation.	1	NWP	From 2003
7.1.3 Ensure that the requirements of the species are taken into account in Kinmel Dunes LNR Management Plan.	1	CCBC, EAW	From 2003
7.1.4 Explore the possibility of extending the appropriate Local Nature Reserve to incorporate the area of young dunes and the strandline.	2	CCBC	By 2006
7.2 Species/Site Safeguard and Management			
7.2.1 Safeguard the precise areas of habitat from severe disturbance by trampling or engineering works and encourage similar habitat to develop.	1	CCBC, CCW	No loss of habitat
7.2.2 Maintain habitat of strandline with sparse sand couch grass lapped by the highest tides.	2	CCBC, CCW	No loss of habitat
7.2.3 Ensure that all managers of the beach and dunes at and around the location are aware of the species, its importance and its habitat requirements.	1, 2	CCBC, CCW	By 2003
7.2.4 Ensure that advice on its management is available to all relevant land managers.	1, 2	CCBC, CCW	By 2004
7.2.5 Discourage collecting and request that people who know the exact location of the colony are discrete in publicising that information.	1	CCW, NWWT, BC	From 2002
7.2.6 Explore the possibilities for the managed retreat of coastal sand dune habitat in the face of sea level rise.	1, 2	CCBC	By 2007
7.2.7 Explore the possibility of creating/restoring habitat for the sandhill rustic along the coast of Conwy County Borough.	2	CCBC	By 2005
7.3 Communication and Publicity			
7.3.1 Ensure communication is maintained between partners and local recorders.	1	CCBC, CCW, BC	From 2003
7.3.2 Raise awareness of biodiversity in Conwy featuring the sandhill rustic moth without endangering the species.	3	CCBC	No set targets
7.4 Research and Monitoring			
7.4.1 Continue regular monitoring of the species	4	BC	At least one survey per annum
7.4.2 Monitor extent of strandline and couch grass habitat.	4	BC	At least one survey per annum
7.4.3 Review this plan every five years	4	CCBC	2007