G2.5b Canarian Phoenix grove

Summary

This endemic habitat of the Canaries comprises sparse *Phoenix canariensis* groves on colluvial deposits, mostly on flat mid-slope sites or at the base of irregular temporary streams and dependent on brief, temporary water-tables present in sporadic winter torrential flows. As the Canarian palms were probably much exploited by humans in historic times, the palm groves are considered to be impoverished versions of former dense micro-forest vegetation. The main threat is from hydrological changes which should be prevented for conservation.

Synthesis

The habitat is assessed as Vulnerable (VU) as it has a very small distribution and range (AOO, EOO) combined with an experienced decline in quality during the last 50 years, which is expected to continue in future. The area of the habitat is more or less stable.

Overall Category & Criteria			
EU 28		EU 28+	
Red List Category	Red List Criteria	Red List Category	Red List Criteria
Vulnerable	B1, B2	Vulnerable	B1, B2

Sub-habitat types that may require further examination

No sub-habitat types are in need of further examination.

Habitat Type

Code and name

G2.5b Canarian Phoenix grove

Canarian palms (*Phoenix canariensis*) grove growing on creek and slope colluvium near the coast. It is an example of recovery stage developing amidst a scrub of Euphorbietum lamarckii and Rhamno-Hypericetum canariensis. Abandoned fields are covered by a nitrophilous scrub of Artemisio-Rumicetum lunariae. Upper semiarid inframediterranean belt. Rambla de Castro, Tenerife, Canary Islands, Spain (Photo: Marcelino del Arco).

Canarian palms (*Phoenix canariensis*) growing on valley bottom amidst a dense reedbed of *Arundo donax* in potential area of Rubo-Salicetum canariensis. Inframediterranean lower semiarid belt. Valle Gran Rey, Island of La Gomera, Canary Islands, Spain (Photo: Marcelino del Arco).

Habitat description

The habitat includes sparse *Phoenix canariensis* groves (palmares) on colluvial deposits, mostly on flat mid-slope sites or at the base of irregular temporary streams. Endemic only to the Canary Islands, they are

dependent on brief, temporary water-tables present in sporadic torrential flows during winter. Thus, they are azonal in the dry to arid bioclimatic belts of the infra-thermomediterranean where the zonal vegetation consists of xerophytic scrub (F8.1: Canary Island xerophytic scrub). As the Canarian palms were probably much exploited by humans in historic times (and still are found as semi-anthropogenic formations for the extraction of 'palm honey' or *guarapo*, a syrup made of the palm sap), the palm groves are considered to be impoverished versions of a former microphanerophytic dense community that was probably co-dominated also by dragon trees (*Dracaena draco*) and had some characteristics of a dry edapho-hygrophilous forest with climbers and tall-shrubs. Usually, the groves are in contact with the xerophytic sclerophyllous or scale-leaf communities (Mayteno-Juniperion canariensis) or canarian-spurge communities (the cardonales and tabaibales of Aeonio-Euphorbion canariensis) included in the G3.9c Macaronesian Juniperus woodland or F8.1 Canary Island xerophytic scrub.

Indicators of quality:

- No forest exploitations in the majority of the area covered by the habitat
- Intact natural hydrology
- Natural composition of canopy
- Structural diversity/ complexity with (semi)natural age structure or completeness of layers
- Typical flora and fauna composition of the region
- Presence of old trees and a variety of dead wood (lying or standing) and the associated flora, fauna and fungi
- Presence of natural disturbance such as treefall openings with natural regeneration
- Long historical continuity (ancient woodland) with high species diversity
- Absence of non-native species (such as *Opuntia* spp. and *Agave* sp.) in all layers (flora & fauna)
- Low cover of nitrophilous species of the *Forskaleo-Rumicetalia lunariae*

Characteristic species:

Phoenix canariensis, *Dracaena draco, Plocama pendula*, *Periploca laevigata*, *Dracaena tamaranae*.

Classification
This habitat may be equivalent to, or broader than, or narrower than the habitats or ecosystems in the following typologies.

EUNIS:

G2.5 [*Phoenix*] groves

EuroVegChecklist:

Phoenicion canariensis Rivas-Mart. et Del Arco in Rivas-Mart. et al. 2011

Annex 1:

9370 Palm groves of *Phoenix*

Emerald:

G2 Broadleaved evergreen woodland

MAES-2:

Woodland and Forest

IUCN:

1.4 Temperate Forest

Does the habitat type present an outstanding example of typical characteristics of one or more biogeographic regions?
Yes

Regions
Macaronesian

Justification
This habitat is an outstanding example of the Macaronesian biogeographical zone, due to its endemic occurrence only to the Canary Islands.
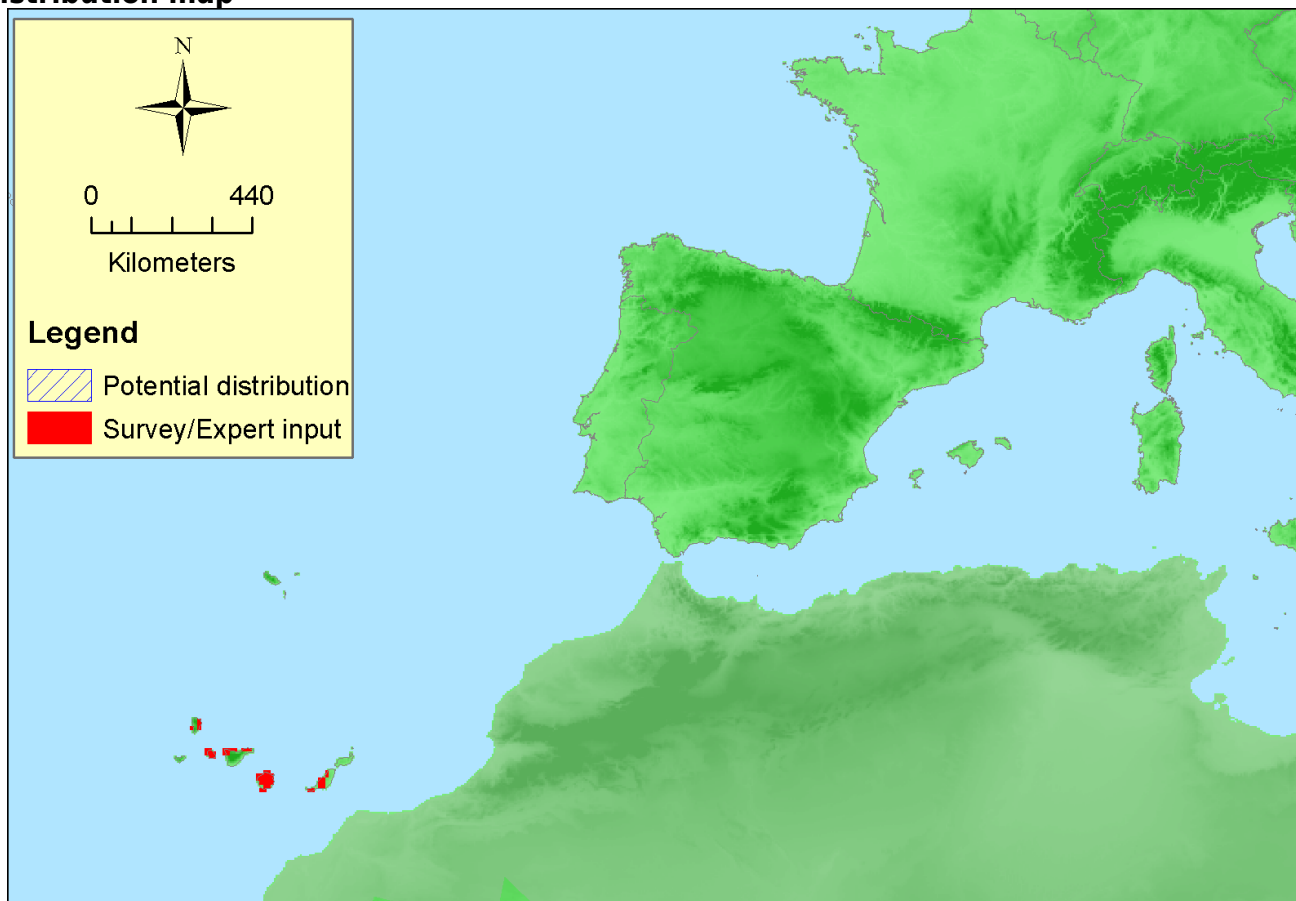
Geographic occurrence and trends

EU 28	Present or Presence Uncertain	Current area of habitat	Recent trend in quantity (last 50 yrs)	Recent trend in quality (last 50 yrs)
Spain	Canary Islands: Present	66.5 Km^2	Increasing	Increasing

Extent of Occurrence, Area of Occupancy and habitat area

	Extent of Occurrence (EOO)	Area of Occupancy (AOO)	Current estimated Total Area	Comment
EU 28	Km^2		66.5 Km^2	
EU 28+	Km^2		66.5 Km^2	

Distribution map

The map is complete. Data sources: Art17.

How much of the current distribution of the habitat type lies within the EU 28?
100%

Trends in quantity

The steady increase in some of the islands is due to the reduction of rural pressure, which however is partially balanced by the roads construction and housing.

- Average current trend in quantity (extent)
  EU 28: Increasing
  EU 28+: Increasing
- Does the habitat type have a small natural range following regression?
  No
  Justification
  The natural range with EOO =13250 Km^2 is not due to deterioration and destruction of the *Phoenix canariensis* woodlands. However it is noted that the Canarian palms were much exploited by humans in historic times and still are found as semi-anthropogenic formations for the extraction of 'palm honey', the palm groves must be impoverished versions of former micro-phanerophytic dense woodland communities.
- Does the habitat have a small natural range by reason of its intrinsically restricted area?
  No
  Justification
  The habitat occurs across all the Canary islands.

Trends in quality

The quality of this habitat is stable in its distribution area and currently is slightly increasing.

- Average current trend in quality
  EU 28: Stable
  EU 28+: Stable

Pressures and threats

The main threat for the Canarian *Phoenix* groves is related to the ecological characteristics of the habitat: these are dependent on temporary water-tables present in sporadic torrential flows during the winter, as well as to the fact that the Canarian palms were probably much exploited by humans in historic times and still are found as semi-anthropogenic formations for the extraction of "palm honey".

List of pressures and threats

Urbanisation, residential and commercial development

Urbanised areas, human habitation

Invasive, other problematic species and genes

Genetic pollution (plants)

Natural System modifications

Water abstractions from groundwater

Conservation and management

The conservation and management actions suggested for the restoration of the *Phoenix canariensis* woodlands are mainly related to the pressures and threats that currently act or potentially could be applied.

List of conservation and management needs

Measures related to forests and wooded habitats

Restoring/Improving forest habitats

Measures related to wetland, freshwater and coastal habitats

Managing water abstraction

Measures related to special resouce use

Regulating/Management exploitation of natural resources on land

Conservation status

Annex 1:

9370: MAC U1

When severely damaged, does the habitat retain the capacity to recover its typical character and functionality?

Based on expert judgement, the habitat recovers rather quickly.

Effort required

10 years
Through intervention

Red List Assessment

Criterion A: Reduction in quantity

Criterion A	A1	A2a	A2b	A3
EU 28	+1 %	unknown %	unknown %	unknown %
EU 28+	+1 %	unknown %	unknown %	unknown %

The calculation of the recent decline in quantity is based on territorial data provided by national experts and the current trend in habitat quantity is steadily increasing.

Criterion B: Restricted geographic distribution

Criterion B	B1				B2				B3
	EOO	a	b	c	AOO	a	b	c	
EU 28	38250 Km^2	Yes	No	unknown	50	Yes	No	unknown	unknown
EU 28+	38250 Km^2	Yes	No	unknown	50	Yes	No	unknown	unknown

The habitat has a very small range (EOO = 38,250 km^2) and AOO (50 grid cells). In combination with a continuing negative pressure in quality due to water extraction, this leads to the category Vulnerable (VU) for B1 and B2. The number of location is not known.

Criterion C and D: Reduction in abiotic and/or biotic quality

Criteria C/D	C/D1		C/D2		C/D3	
	Extent affected	Relative severity	Extent affected	Relative severity	Extent affected	Relative severity
EU 28	50 %	25 %	unknown %	unknown %	unknown %	unknown %
EU 28+	50 %	25 %	unknown %	unknown %	unknown %	unknown %

Criterion C	C1		C2		C3	
	Extent affected	Relative severity	Extent affected	Relative severity	Extent affected	Relative severity
EU 28	unknown %	unknown %	unknown %	unknown %	unknown %	unknown %
EU 28+	unknown %	unknown %	unknown %	unknown %	unknown %	unknown %

Criterion D	D1		D2		D3	
	Extent affected	Relative severity	Extent affected	Relative severity	Extent affected	Relative severity
EU 28	unknown %	unknown%	unknown %	unknown%	unknown %	unknown%
EU 28+	unknown %	unknown%	unknown %	unknown%	unknown %	unknown%

The trend in quality (extent affected and severity of degradation) is calculated by summarizing national expert assessment. The values are too low to reach the thresholds for Near Threatened.

Criterion E: Quantitative analysis to evaluate risk of habitat collapse

Criterion E	Probability of collapse
EU 28	unknown
EU 28+	unknown

There is no quantitative analysis available to estimate the probability this habitat collapses.

Overall assessment "Balance sheet" for EU 28 and EU 28+

	A1	A2a	A2b	A3	B1	B2	B3	C/D1	C/D2	C/D3	C1	C2	C3	D1	D2	D3	E
EU28	LC	DD	DD	DD	VU	VU	DD	LC	DD	DD	DD	DD	DD	DD	DD	DD	DD
EU28+	LC	DD	DD	DD	VU	VU	DD	LC	DD	DD	DD	DD	DD	DD	DD	DD	DD

Overall Category & Criteria			
EU 28		EU 28+	
Red List Category	Red List Criteria	Red List Category	Red List Criteria
Vulnerable	B1, B2	Vulnerable	B1, B2

Confidence in the assessment
High (mainly based on quantitative data sources and/or scientific literature)

Assessors
P. Dimopoulos

Contributors
Type description: J. Capelo

Territorial data: J. Loidi

Working Group Forests: F. Attore, R-J. Bijlsma, M. Chytrý, P. Dimopoulos, B. Renaux, A. Ssymank, T. Tonteri, M. Valderrabano

Reviewers
J. Loidi

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References

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