



REPUBLIC OF CROATIA

Ministry of Environmental Protection
and Green Transition

Institute for Environment and Nature

Habitats of Croatia

Condition of the habitat

Tamara Kirin

Senior Adviser

5 May 2025

1. time reporting: 2013 – 1018

Terrestrial non-forest habitats

= Map of terrestrial non-forest habitats 2016 (<https://bioportal.hr/gis/>) → contained few information about the condition in EN sites (no specific instructions were given to the field experts)

Forest habitats

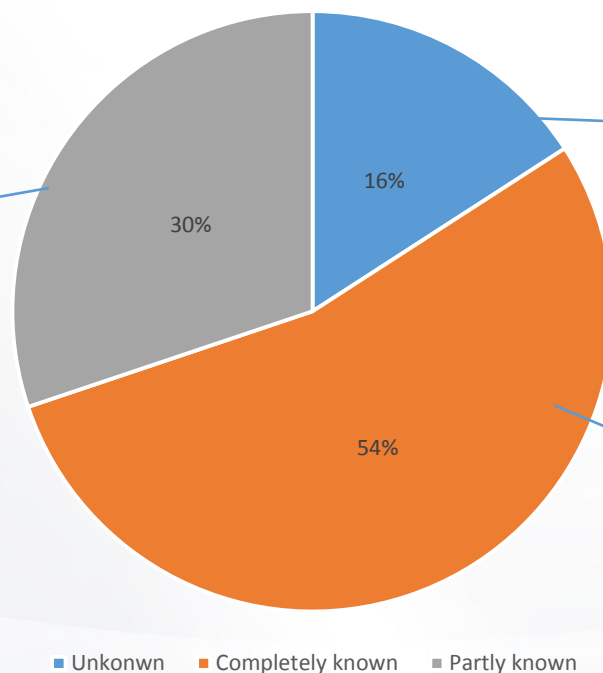
= prepared by specialists from the Faculty of Forestry and Wood Technology using the spatial data (<https://webgis.hrsume.hr/arcgis/apps/webappviewer/index.html?id=8bb3e1d6b80d49ad9e0193f8b62380e2>) (informations for GIS were based on Forest Management Plans which are being revised every 10 years) → no information about condition – just the expert judgment

Marine habitats

= Croatian Habitat map 2004 (<https://bioportal.hr/gis/>)
- the representation of marine habitats was indicative and was obtained using the spatial modeling method - no information about condition

Condition of the habitat 2018

- between 1 – 96% of the particular habitat has been evaluated in the field— median value is 43% of the habitat



Marine and very rare habitats

- Habitats with very small areas
- forests

Habitats in which less than 50% of the territory has been visited in 2018:

4030 European dry heaths

62A0 Eastern sub-Mediterranean dry grasslands (*Scorzoneratalia villosae*)

6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates (*Festuco-Brometalia*) (* important orchid sites)

6540 Sub-Mediterranean grasslands of the *Molinio-Hordeion secalini*

2110 Embryonic shifting dunes

6220 Pseudo-steppe with grasses and annuals of the *Thero-Brachypodietea*

6170 Alpine and subalpine calcareous grasslands

1410 Mudflats and sandflats not covered by seawater at low tide

3150 Natural eutrophic lakes with *Magnopotamion* or *Hydrocharition* - type vegetation

6430 Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels

6510 Lowland hay meadows (*Alopecurus pratensis*, *Sanguisorba officinalis*)

1210 Annual vegetation of drift lines

3130 Oligotrophic to mesotrophic standing waters with vegetation of the *Littorelletea uniflorae* and/or of the *Isoëto-Nanojuncetea*

32A0 Tufa cascades of karstic rivers in the Dinaric Alps

1420 Mediterranean and thermo-Atlantic halophilous scrubs (*Sarcocornetea fruticosi*)

6410 Molinia meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*)

HOW TO EVALUATE CONDITION IN NEW REPORTING PERIOD?

- 2021-2023

Operational Programme Competitiveness and cohesion

Project KK.06.5.1.03.0001

„Development of a system for monitoring the conservation status of species and habitat types“

= our consultants (Oikon d.o.o.) have developed programmes for all terrestrial habitat types and tested them



Detailed instructions about habitat condition assessment

6510 Lowland hay meadows (*Alopecurus pratensis*, *Sanguisorba officinalis*)

INDICATOR	GOOD	MEDIUM	BAD
Representation of typical species	species composition typical of the habitat type, typical species predominate	the composition of typical species is depleted, but the species typical of the habitat type still predominate	the species composition does not correspond to the typical
Representation of competitive species	Representation of unfavorable species on the transect < 5% or in the observation area only single individuals of competing species were observed	Presence of unfavourable species on transect 5 – 20% or in the area of observation of a competitive species, but it cannot be determined whether it shows signs of spreading	Representation of unfavourable species on the transect > 20% or in the observation area, competitive species with signs of spread, i.e. significantly negatively impact the observed habitat type
Optional indicator			
STRUCTURE	GOOD	MEDIUM	BAD

6510 Lowland hay meadows (*Alopecurus pratensis*, *Sanguisorba officinalis*)

INDICATOR	GOOD	MEDIUM	BAD
Presence of grazing/mowing	extensive	intensive	no grazing/mowing
Succession	not present	moderate	very present
Spatial distribution of the habitat	The habitat is continuous (> 75% of the area covered), and the negative edge effect is not significant and does not show a tendency to spread.	The habitat is fragmented (in a mosaic or mixed with other habitat types), but target habitat type still predominates. Individual habitat segments are more than 2 m apart and/or the areas of individual segments are less than 10 m ²	The habitat is in several smaller units ("spotted") and the target habitat type is represented by less than 50% of the area. Significant edge effect recorded. Individual habitat segments are more than 5 m apart and/or the areas of individual segments are less than 5 m ²
FUNCTION	GOOD	MEDIUM	BAD

6510 Lowland hay meadows (*Alopecurus pratensis*, *Sanguisorba officinalis*)

INDICATOR	GOOD	MEDIUM	BAD
Representation of typical species	species composition typical of the habitat type, typical species predominate	the composition of typical species is depleted, but the species typical of the habitat type still predominate	the species composition does not correspond to the typical
Representation of competitive species	Representation of unfavorable species on the transect < 5% or in the observation area only single individuals of competing species were observed	Presence of unfavourable species on transect 5 – 20% or in the area of observation of a competitive species, but it cannot be determined whether it shows signs of spreading	Representation of unfavourable species on the transect > 20% or in the observation area, competitive species with signs of spread, i.e. significantly negatively impact the observed habitat type
Optional indicator			
STRUCTURE	GOOD	MEDIUM	BAD
INDICATOR	GOOD	MEDIUM	BAD
Presence of grazing/mowing	extensive	intensive	no grazing/mowing
Succession	not present	moderate	very present
Spatial distribution of	The habitat is continuous (> 75% of the area covered), and the negative edge effect is not significant and does not show a tendency to spread.	The habitat is fragmented (in a mosaic or mixed with other habitat types), but target habitat type still predominates. Individual habitat segments are more than 2 m apart and/or the areas of individual segments are less than 10 m ²	The habitat is in several smaller units ("spotted") and the target habitat type is represented by less than 50% of the area. Significant edge effect recorded. Individual habitat segments are more than 5 m apart and/or the areas of individual segments are less than 5 m ²
FUNCTION	GOOD	MEDIUM	BAD
CONDITION	GOOD	MEDIUM	BAD

GOOD CONDITION

80 %

BAD CONDITION

20 %

2018 - 2024

- Habitats covering small areas have been visited and evaluated
- Habitats covering big surfaces have not been visited enough?
What is enough?

			CONDITION GOOD min	CONDITION GOOD max	CONDITION BAD min	CONDITION BAD max	Unknown min	Unknown max
91K0	Illyrian Fagus sylvatica forests (Aremonio-Fagion)	ALP	14.12	14.12	0	0	3746.93	3746.93
91K0	Illyrian Fagus sylvatica forests (Aremonio-Fagion)	CON	12.47	12.47	0.09	0.09	945.43	945.43
91K0	Illyrian Fagus sylvatica forests (Aremonio-Fagion)	MED	1.18	1.18	0	0	340.92	340.92
91R0	Dinaric dolomite Scots pine forests (Genisto januensis- Pinetum)	ALP	2.36	2.36	0	0	30.83	30.83
6510	Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis)	ALP	0.42	0.42	0.17	0.17	94.75	94.75
6510	Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis)	MED	0.02	0.02	0.38	0.38	4.25	4.25
6510	Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis)	CON	0.08	0.08	0.07	0.07	212.72	212.72

REMOTE SENSING:

CLCplus Backbone 2021 (raster 10 m), Europe, 3-yearly

<https://land.copernicus.eu/en/products/clc-backbone>

FORESTS :

- Overlap known polygons with CLC + - estimate the % of the forest currently being in the fase of regrowth

GRASSLANDS:

- Overlap known polygons with CAP payments map





Thank you for your attention!

Ministry of Environmental Protection and Green Transition

Institute for Environment and Nature

Radnička 80/7

10 000 Zagreb

Croatia

Phone: ++385 1 488 68 40

E-mail: zavod@mzozt.hr