

Ecosystem Service	Existence value of nature
CICES class name	Characteristics or features of living systems that have an existence value
CICES Section	Cultural (Biotic)
CICES Class code	3.2.2.1

Brief Description

- The things in nature that should be conserved
- The biophysical characteristics or qualities of species or ecosystems (settings/landscapes/cultural spaces) which people seek to preserve because of their non-utilitarian qualities

Sample Indicators

Indicator values from			
Experiment or direct measurement		Survey	
Expert assessment		Statistical- or census data	
Model or GIS		Literature values	
Stakeholder participation		Not provided	

Table 1: Field Scale

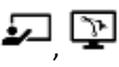
Indicator	Unit	Indicator values from
<p>^[1] Combination of the following indicators:</p> <p>Existence value of a target species. Site quality: habitat suitability for prey (low, medium, high)</p> <p>Existence value of a target species. Site opportunity: local level of habitat fragmentation, scaled to [0 -1]</p> <p>Existence value of a target species. Scarcity: Risk of species population falling below viable population size, scaled to [0 -1]</p> <p>Existence value of a target species. Reliability: Risk of future service loss through urban development within a 3-mile radius, scaled to [0 -1]</p>	-	

Table 2: Regional Scale

Indicator	Unit	Indicator values from
[2] Intrinsic value of biodiversity: values for land cover classes. The matrix by Burkhard et al., 2012 (DOI: 10.1016/j.ecolind.2011.06.019) was used in this study.	Index 0 - 5	
[3] Existence value: Participatory mapping. Respondents in an online survey mark on a map the areas in their region where different cultural ecosystem services are supplied. Then, the proportion of markings in each of the investigated land cover classes is calculated. After that, values are calculated for subregions. The proportions are multiplied with the area extent of the respective land cover classes in the sub-region, and results for all land cover classes are summed up	ha	
[4] Number of spiritual facilities per landscape	# * ha ⁻¹	
[4] Number of national parks	#	

Table 3: National Scale

Indicator	Unit	Indicator values from
[5] Diversity of breeding bird species (Simpson-Index)	-	
[5] Number of farmland bird species	#	
[6] Species of conservation concern: based on species listed in the U.K. Biodiversity Action Plan and recorded in a grid cell	Not provided	
[7] Cropland or grassland in protected agricultural areas (e.g., Natura2000, Biosphere reserves, IUCN category V areas, World Heritage UNESCO sites related to agricultural landscape, landscape conservation areas)	ha	

References

No.	Citation
1	Wainger LA, King DM, Mack RN, Price EW, Maslin T (2010) Can the concept of ecosystem services be practically applied to improve natural resource management decisions? <i>Ecological Economics</i> 69(5): 978-987. DOI: 10.1016/j.ecolecon.2009.12.011
2 ²³ *	Zhang ZM, Gao JF, Fan XY, Lan Y, Zhao MS (2017) Response of ecosystem services to socioeconomic development in the Yangtze River Basin, China. <i>Ecological Indicators</i> 72: 481-493. DOI: 10.1016/j.ecolind.2016.08.035

²³* The impact area discussed on this factsheet is not a focus of the cited paper



No.	Citation
3	Jaligot R, Chenal J, Bosch M, Hasler S (2019) Historical dynamics of ecosystem services and land management policies in Switzerland. <i>Ecological Indicators</i> 101: 81-90. DOI: 10.1016/j.ecolind.2019.01.007
4*	Pham HV, Torresan S, Critto A, Marcomini A (2019) Alteration of freshwater ecosystem services under global change - A review focusing on the Po River basin (Italy) and the Red River basin (Vietnam). <i>Science of the Total Environment</i> 652: 1347-1365. DOI: 10.1016/j.scitotenv.2018.10.303
5	Bateman IJ, Harwood AR, Abson DJ, Andrews B, Crowe A, Dugdale S, Fezzi C, Foden J, Hadley D, Haines-Young R, Hulme M, Kontoleon A, Munday P, Pascual U, Paterson J, Perino G, Sen A, Siriwardena G, Termansen M (2014) Economic Analysis for the UK National Ecosystem Assessment: Synthesis and Scenario Valuation of Changes in Ecosystem Services. <i>Environmental & Resource Economics</i> 57(2): 273-297. DOI: 10.1007/s10640-013-9662-y
6	Holland RA, Eigenbrod F, Armsworth PR, Anderson BJ, Thomas CD, Heinemeyer A, Gillings S, Roy DB, Gaston KJ (2011) Spatial covariation between freshwater and terrestrial ecosystem services. <i>Ecological Applications</i> 21(6): 2034-2048. DOI: 10.1890/09-2195.1
7	Maes J, Liqueste C, Teller A, Erhard M, Paracchini ML, Barredo JI, Grizzetti B, Cardoso A, Somma F, Petersen JE, Meiner A, Gelabert ER, Zal N, Kristensen P, Bastrup-Birk A, Biala K, Piroddi C, Egoh B, Degeorges P, Fiorina C, Santos-Martín F, Naruševičius V, Verboven J, Pereira HM, Bengtsson J, Gocheva K, Marta-Pedroso C, Snäll T, Estreguil C, San-Miguel-Ayanz J, Pérez-Soba M, Grêt-Regamey A, Lillebø AI, Malak DA, Condé S, Moen J, Czúcz B, Drakou EG, Zulian G, Lavalle C (2016) An indicator framework for assessing ecosystem services in support of the EU Biodiversity Strategy to 2020. <i>Ecosystem Services</i> 17: 14-23. DOI: 10.1016/j.ecoser.2015.10.023