

		<h1>Hunting</h1> <p><b>Responsible partner:</b> IGB</p> <p><b>Actuality:</b> November 2021</p>				
<b>Interpretation</b> <p>This ecosystem service only describes food availability from hunting, while recreation and experiences obtained through hunting represents a part of the cultural ecosystem services. The indicator for that ecosystem service based is on data on the hunting yield as a multi-annual average of harvest data for wild animals. It indicates the amount of withdrawals of wild animal meat in relation to the hunting areas size in the respective floodplain area, either for the whole segment or the respective compartment (active or potential floodplain). For this purpose, the areal share of the hunting areas in the reference area is multiplied by the respective areal yield, and the result is classified using a yield scale. As an alternative to the hunting yield, the Harvest Quotas (HQ) can be used where available. The Harvest Quotas represents the number of animals that can be harvested based on estimations of animal population sizes.</p>						
<b>Class</b>	<b>Abbr.</b>	<b>Description</b>			<b>Spatial reference</b>	
Provisioning	HF	The indicator assesses the hunting for food as an ecosystem service based on data on hunting yield (as a multi-annual average) from potential hunting areas.			Floodplain segment or compartment <input checked="" type="checkbox"/> potential floodplain <input checked="" type="checkbox"/> active floodplain <input type="checkbox"/> river	
<b>Variable</b>	<b>Abbr.</b>	<b>Unit</b>	<b>Variable description</b>	<b>Data basis</b>	<b>Comment</b>	
Reference floodplain area in the respective segment or compartment (active or potential floodplain)	$A_{seg}$ $A_{AFPseg}$ $A_{PPFseg}$	ha	Determination of area of active floodplain, potential floodplain segment	Floodplain segments 100-year flood inundation map		
Hunting area in total segment or compartments (active and potential floodplain)	$HA_{seg}$ $HA_{AFPseg}$ $HA_{PPFseg}$	ha	Determination of the hunting area within the reference floodplain areas	Hunting Areas Map or land use map		
Hunting yield or Harvest Quotas from the hunting areas	$HY_i$	no ha <sup>-1</sup> year <sup>-1</sup>	Statistic on the commercial hunting Normative Acts with Harvest Quotas	Average annual data on harvest of wild animals		
<b>Calculation method</b>						
<b>Calculation steps</b>			<b>Indicator</b>			
1. Determination of the reference floodplain area size for each segment $j$ (in GIS). 2. Identification of hunting areas $i$ within the reference floodplain areas $j$ from Hunting Areas Map data (GIS) or land use date (e.g. forest, rangeland, wetlands), with differentiation according to compartment (active or potential floodplain). 3. Overlay of hunting area with data on yield / average annual harvest data for wild animals (in GIS) 4. Calculation of the indicator for each reference floodplain area 5. Classification of the resulting yield into 5 classes			Calculation of the commercial hunting for floodplain segments (for $j = 1, 2, \dots, n$ floodplain segments): $Ind_{CH}(j) = \sum_{i=1}^n (j) \frac{HA_{seg,i} * HW_i}{A_{seg,j}}$ $j = 1, 2, \dots, m$ Floodplain segments $i = 1, 2, \dots, n$ Sub-areas (hunting areas) within the reference floodplain area in the respective segment			
<b>Ind<sub>HF</sub></b>	> 80%	> 60% - 80%	> 40% - 60%	> 20% - 40%	≤ 20%	0
<b>Evaluation Class</b>	5	4	3	2	1	0
<b>Qualitative Evaluation</b>	Very high yield	Above average yield	Average yield	Below-average yield	Very low yield	No yield