

Development of Glacial Areas in Alpine Protected Areas

ALPARC has been requested by the Ötztal Nature Park (A) for a short enquiry concerning remaining glacier surfaces in the Alpine protected areas. Besides the fact that these statistics may be interesting for the parks, it gives the opportunity for a knowledge and management exchange on the topic. A survey has been conducted within protected areas and parks and on glacier loss during the last decades among ALPARC members. ALPARC has unified the received data and compiled it in the tables below. Please note that ALPARC did not collect or analyse any primary data and thus does not take any responsibility for the accuracy of the data.

Glacier Surface in Protected Areas

Country	Park	Glaciated area today		
		Year	Area (ha)	% glaciated area of park area
Austria	Hohe Tauern (Carinthia, Tyrol, Salzburg)	2021	12 600	6,80%
Austria	Ötztal Nature Park	2020	8 925	17,50%
France	ASTERS - Conservatoire d'espaces naturels Haute-Savoie	2022	697	3,72%
France	Les Ecrins National Park	2020	6 000	6,52%
France	Vanoise National Park	2016	9 200	12,42%
Germany	Berchtesgaden National Park	2018	5,20	0,025%
Italy	Adamello Brenta Nature Park	2022	1 053	1,70%
Italy	Alpe Veglia e Devero Nature Park (Aree Protette dell'Ossola)	2022	176	2,05%
Italy	Alta valle Antrona Nature Park (Aree Protette dell'Ossola)	2022	28	0,37%
Italy	Aree Protette Alpi Marittime	2022	44	0,16%
Italy	Orobie Valtellinesi Nature Park	2022	118	0,27%
Italy	Paneveggio Pale di San Martino Nature Park	2022	20	0,102%
Italy	Parco dell'Adamello	2021	1 400	2,74%
Italy	Prejulia Alps Nature Park	2016	117	1,24%
Italy	Stelvio National Park: <i>Lombard part</i>	2016	2 413	4,00%
	Stelvio National Park: <i>South Tyrolean part</i>	2017	3 482	6,50%
	Stelvio National Park: <i>Trentine part</i>	2022	597	3,40%
Slovenia	Triglav National Park	2022	0,70	0,00083%
Switzerland	Beverin Nature Park	2016	150	0,30%
Switzerland	Biosfera Val Müstair	2016	0	0,00%
Switzerland	Landschaftspark Binntal	2016	200	1,20%
Switzerland	Parc Ela	2016	220	0,30%
Switzerland	Pfyn-Finges Nature Park	2016	1 820	5,60%
Switzerland	UNESCO World Heritage Swiss Alps Jungfrau-Aletsch	2016	28 300	34,34%
Switzerland	Swiss National Park	2016	0	0,00%
Switzerland	Valley of Trient Regional Nature Park	2016	1 080	4,90%
Switzerland	Val Calanca Nature Park	2016	20	0,20%

History of glaciated areas in Protected Areas

		Year	Area (ha)	Reduction of glaciated area until latest record*
Austria	Hohe Tauern (Carinthia, Tyrol, Salzburg)	1969	20 600	38,83%
		2021	12 600	
France	ASTERS - Conservatoire d'espaces naturels Haute-Savoie	1967	1 517,30	54,06%
		2022	697	
France	Les Ecrins National Park	1980	10 000	40,00%
		2020	6 000	
France	Vanoise National Park	1971	13 200	30,30%
		2016	9 200	
Germany	Berchtesgaden National Park	1959	13,10	60,31%
		2018	5,20	
Italy	Adamello Brenta Nature Park	2007	1 820	42,15%
		2022	1 053	
Italy	Aree Protette Alpi Marittime	1961	105	58,10%
		2019	44	
Italy	Parco dell'Adamello	1959	1 790	21,79%
		2021	1 400	
Italy	Stelvio National Park - South Tyrolean Part	1997	4 739	26,52%
		2017	3 482	
Slovenia	Triglav National Park	1946	14	95,00%
		2022	0,70	
Switzerland	UNESCO World Heritage Swiss Alps Jungfrau-Aletsch	1976	35 000	19,14%
		2016	28 300	

Country	Park	Year	Ice Volume (km ³)**	Reduction of glaciated area until latest record*
Switzerland	Beverin Nature Park	1973	0,167	83,83%
		2016	0,027	
Switzerland	Biosfera Val Müstair	1973	0,004	100,00%
		2016	0,000	
Switzerland	Landschaftspark Binntal	1973	0,227	84,58%
		2016	0,035	
Switzerland	Parc Ela	1973	0,278	77,70%
		2016	0,062	
Switzerland	Pfyn-Finges Nature Park	1973	1,403	38,70%
		2016	0,860	
Switzerland	Swiss National Park	1973	0,021	100,00%
		2016	0,000	
Switzerland	Valley of Trient Regional Nature Park	1973	0,818	34,35%
		2016	0,537	
Switzerland	Val Calanca Nature Park	1973	0,023	78,26%
		2016	0,005	

* calculated based on received data

** Data based on ice volume, reference period: 1973-2016