Supplementary materials

Table S1. Questions of the semi-structured interviews.

1)	**What are the main natural and cultural attractions of the area?**
2)	**What kind of tourism does your area visit and what are the main activities of tourists?**
3)	**The park offers many cultural services, but for them to be used it is necessary for people to visit the Park; this inevitably causes an impact on the protected area. How do you see tourism interacting with habitat conservation and wildlife protection? Are there types of tourism that have a greater impact on the territory in your opinion (e.g. mountaineers, climbers, etc)?**
4)	**Tourism is certainly a resource for the Park but can in some ways cause problems in the management of fauna and in the conservation of habitats. What is your perception of this? In your experience have you had episodes of criticality between tourism and conservation or have they never come into conflict?**
5)	**Are there any tourism models that you consider more sustainable than others? Considering your experience at the Park, how did you try to develop more sustainable tourism?**
6)	**Have you seen a change over the years with respect to the type of tourism, and attitudes /attitudes of people attending the park?**
7)	**What is the type of forest management within the Park and how does it differ from the forests of the neighbouring territories but excluded from the Park?**
8)	**Has an assessment of ecosystem services already been carried out at the Park? If so, of which?**
9)	**[ONLY IF YOU ANSWER THE PREVIOUS QUESTION] Are ecosystem services a possible conservation tool? If so, how?**
10)	**In your opinion, are there any critical issues in the concept of ecosystem services?**
11)	**This summer there will be a survey on the use of the Park and the perception of ecosystem services by different stake-holders. With regard to the categories of stakeholders identified by us (see list at the end of the document), do you**

	think there is some other unrepresented category that would be useful to consult (as well as categories not of interest to the Park)?
12)	**How did you notice that the pandemic changed the attendance in the Park? Was there any noticeable effect on the quantity and attitude of tourists and/or residents?**

Table S2. Questionnaire administered to users (example at the Adamello Regional Park)

UNIVERSITA' MILANO-BICOCCA
DIPARTIMENTO DI SCIENZE DELL'AMBIENTE DELLA TERRA

WHAT DOES THE ADAMELLO REGIONAL PARK REPRESENT TO YOU?

The laboratory of landscape ecology of the Earth and Environmental Sciences of the University Milano-Bicocca started an experimental investigation which has the aim to know what the perception of benefits is coming from nature, and which are the reasons that push people to visit the park.

The data submitted with this form will be treated internally in the Laboratory, in anonymous form, strictly reserved and only for research purpose. The joining is personal and willing.

DATE: _____ PLACE: _____

PART 1

PART 1: mark, for every statement, the answer that you believe is right:

	Strongly disagree	Slightly disagree	Neither agree nor disagree	Moderately agree	Strongly agree
I like to observe animals (es. ibex, marmots, chamois, …)					
I like to observe flowers and trees					
I like to observe the beautiful landscape					
This location is an important source of artistic inspiration (photography, painting , music,…)					
Il Parco mi permette di conoscere la cultura e la storia del mio paese					
This place, in my opinion, contains a very important cultural heritage (traditions, customs and history)					
I have got life memories related to this place that are very important to me.					
This place inspires in me a sense of belonging (I feel at home, I feel a deep sense of familiarity)					
This place allows me to express my identity (I feel myself here, I can express who I am through the activities I can do)					

This place allows me to know flora and fauna and to better comprehend the ecosystems					
This place contributes to my mental health (it makes me feel mentally better)					
This place contributes to my physical well-being (it allows me to do activities that make me feel physically better, I can breathe fresh air, …)					
This place gives me the chance to do recreational activities.					
This place allows me to spend time with my family /friends					
This place allows me to create new social relationships (ex. talk to new people)					
This place is important to me from a spiritual/religious point of view (I can pray here, it has got religious symbolic elements)					
This place has got an intrinsic value because of its existence, no matter what I or other people can obtain from it. I give value to its existence and to the fact that it will exist in the future.					
I consider important the fact that the Park produces its own food (ex. trademark products, typical local products)					
I consider it important that the Park produces wood.					
I consider it important that the Park preserve the biodiversity of flora and fauna.					
Per me è importante il fatto che il Parco conserva la biodiversità di fauna e flora					

PART 2

Mark, for every statement, the answer that you believe is right:

- How often do you visit the Park? *(choose only one answer)*

□ It is the first time □ I visited it a few times (less than 3)

□ I visit it occasionally (when it happens, not usually) □ I usually visit it (it's a recurring destination)

- When you visit the Park, how long do you normally stay?

□ I stay just one day □ I stay 1 or 2 nights □ 1 week □ 2 weeks □ More than 2 weeks

- Which activities do you do in the Park:

	Never	Sometimes	Oftes	Always
Cultural tourism (visit villages, museums , places of culture)				

Food and wine tourism				
Nature tourism (observing flora, fauna and landscapes)				
Walking (short walks on easy paths)				
Trekking (even challenging hikes of many hours)				
Mountaineering				
Climbing				
Mountain bike				
Canoeing/rafting				
Photography				
Skiing				

In which category of stakeholder do you recognise yourself? (you can choose more than one)

□ Tourist	□ Naturalistic associations
□ Hut manager	□ Researcher
□ Hotel, bar, restaurant owner, camping	□ Park employee
□ Tourism office worker	□ Resident in the Park
□ Shepherd	□ Resident outside the Park but nearby
□ Local producer	□ Owner of a second home in the Park
□ Craftsman	Consortia and Forestry companies
□ Hut/Educational farm	□ Altro:_____

- Has your frequency of visits to the Park or other natural areas changed after the Covid-19 Pandemic?

□ Yes □ No - If yes, how? □ More frequent visits □ Less frequent visits

Mark the answer that you believe is right:

Covid-19 pandemic makes me better evaluate the importance of natural protected areas as leisure and wellness places.	Strongly disagree	slightly disagree	neither agree nor disagree	moderately agree	strongly agree

Have you ever heard about ecosystem services?

□ Yes □ No

Do you know that the first part is about ecosystem services arising from nature that contributes to our wellness?

□ Yes □ No

PART 4

We need some information on your registration.

Age: _____

Gender: _____

Where are you from? _____

If you are visiting the Park with whom do you do it? □ Alone □ With my partner □ With my family □ With my friends

Table S3. Stakeholders' categories identified through surveys with Park's managers. In bold, the main categories used for the analyses.

Stakeholders' categories:
• **Workers in catering and/or tourism** Hut managers Hoteliers, bars/restaurants • **Tourism workers** Tourism agencies • **Tourists** Non-expert hikers Expert hikers (trekking) Cultural/museum/food and wine tourism Alpinists Climbers Mountain biker Canoeing/rafting Photographers Secondary residences • **Residents in the Park** • **Residents outside the park but in neighbouring municipalities** • **Park's workers** • **Craftsman/Producer/Breeder** Shepherds/breeders Local producers • **Researchers** Researcher with activities in progress or carried out in the Park

Table S4 Number of replies and percentage of biographical data. In columns gender, in rows age classes.

Adamello				**Gran Paradiso**			
F		**M**		**F**		**M**	
N of replies	**%**	**N of replies**	**%**	**N of replies**	**%**	**N of replies**	**%**
<20				**<20**			
104	10%	97	9%	127	5%	101	4%
21-30				**21-30**			
130	12%	88	8%	175	7%	169	7%
31-40				**31-40**			
54	5%	45	4%	151	6%	149	6%
41-50				**41-50**			
119	11%	81	8%	272	12%	175	7%
51-60				**51-60**			
97	9%	78	7%	274	12%	204	9%
61-70				**61-70**			
43	4%	46	4%	180	8%	184	8%
>70				**>70**			
34	3%	36	3%	79	3%	80	3%

Table S5 Description of frequency of visits at the PAs and type of activity carried out

Adamello	**First time**		**Less than 3 times**		**More than three times**		**Usually (recurrent destination)**		**Total of replies**
	N of replies	**%**	**N of replies**	**%**	**N of replies**	**%**	**N of replies**	**%**	
Relaxation	1	11	1	11	0	0	7	78	9
Cultural tourism	4	57	2	29	1	14		0	7
Cultural and naturalistic tourism	11	37	11	37	3	10	5	17	30
Cultural and sports tourism	5	17	12	40	3	10	10	33	30
Cultural and food tourism	2	67	1	33		0		0	3
Cultural tourism/food and wine/nature	9	26	10	29	4	11	12	34	35
Cultural/food and wine/sports tourism	8	38	7	33	4	19	2	10	21
Cultural/naturalistic/sports tourism	16	18	19	21	11	12	45	49	91
Food and wine tourism	1	33	1	33		0	1	33	3
Food and wine and nature tourism	2	14	7	50		0	5	36	14
Food and wine tourism and sports	1	5	9	41	7	32	5	23	22
Food and wine/nature/sport tourism	11	15	16	22	6	8	39	54	72
Nature tourism	7	32	5	23	4	18	6	27	22
Nature and sports tourism	21	19	20	19	25	23	42	39	108
Sports tourism	13	15	25	29	9	10	39	45	86
All categories	93	18	137	27	42	8	234	46	506
Gran Paradiso	**N of replies**	**%**	**N of replies**	**%**	**N of replies**	**%**	**N of replies**	**%**	**Total of replies**
Relaxation	0	0	0	0	0	0	4	100	4
Cultural tourism	4	44	2	22		0	3	33	9
Cultural and naturalistic tourism	6	60		0	1	10	3	30	10
Cultural and sports tourism	12	19	20	32	8	13	23	37	63
Cultural and food tourism	1	25	1	25		0	2	50	4
Cultural tourism/food and wine/nature	1	33		0	1	33	1	33	3
Cultural/food and wine/sports tourism	10	22	7	16	5	11	23	51	45
Cultural/naturalistic/sports tourism	66	19	67	19	53	15	169	48	355
Food and wine tourism	6	21	7	24	1	3	15	52	29
Food and wine and nature tourism	1	33		0		0	2	67	3
Food and wine tourism and sports	11	18	4	7	11	18	34	57	60
Food and wine/nature/sport tourism	52	17	50	17	43	14	155	52	300
Nature tourism	19	19	34	34	17	17	31	31	101
Nature and sports tourism	80	16	70	14	77	16	267	54	494
Sports tourism	43	15	36	13	45	16	163	57	287
All categories	129	23	98	17	77	14	259	46	563

Table S6. Detailed table of how the frequency of visits changed in percentage, considering more or less visits, at the Adamello Regional Park. Percentages for Naturalistic Associations at PNGP and Iren Energy workers at AD are not available, due to the lack of the category at the specific PA.

	AD		**PNGP**	
Changes COVID AD	**Less frequent visits**	**More frequent visits**	**Less frequent visits**	**More frequent visits**
Artisan/Producer/Breeder	67%	33%	67%	33%
Employee of the Park	100%	0%	0%	100%
Naturalistic associations	100%	0%	NA	NA
Owner or user second home in the Park (or nearby)	68%	32%	71%	29%
Researcher with activities in progress or carried out in the Park	0%	100%	57%	43%
Resident (in the Park)	65%	35%	55%	45%
Resident (outside the Park but in neighbouring municipalities)	67%	33%	61%	35%
Tourism worker	100%	0%	88%	13%
Tourist	72%	28%	64%	35%
Worker in catering and/or tourism	65%	35%	59%	41%
Worker Iren Energy	NA	NA	50%	50%

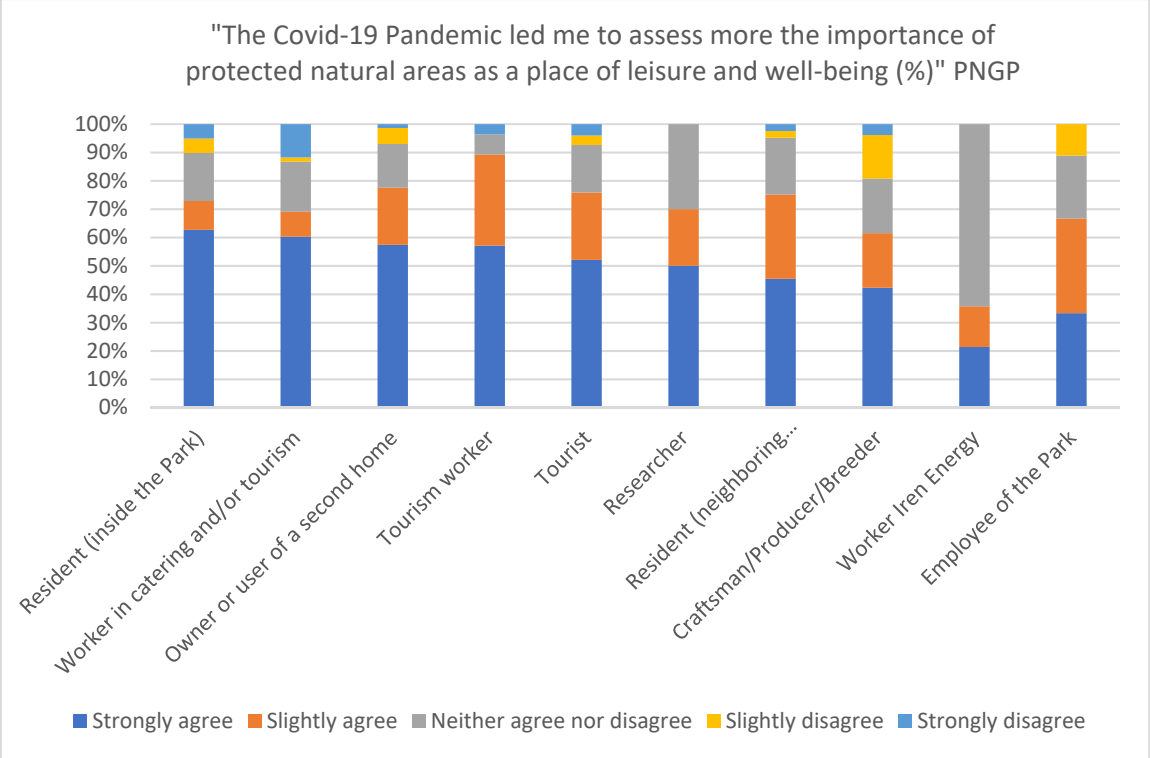


Figure S1 Agreement (in percentage) of the development of a new perception of the PA as a place of leisure and well-being after the COVID-19 at the PNGP.

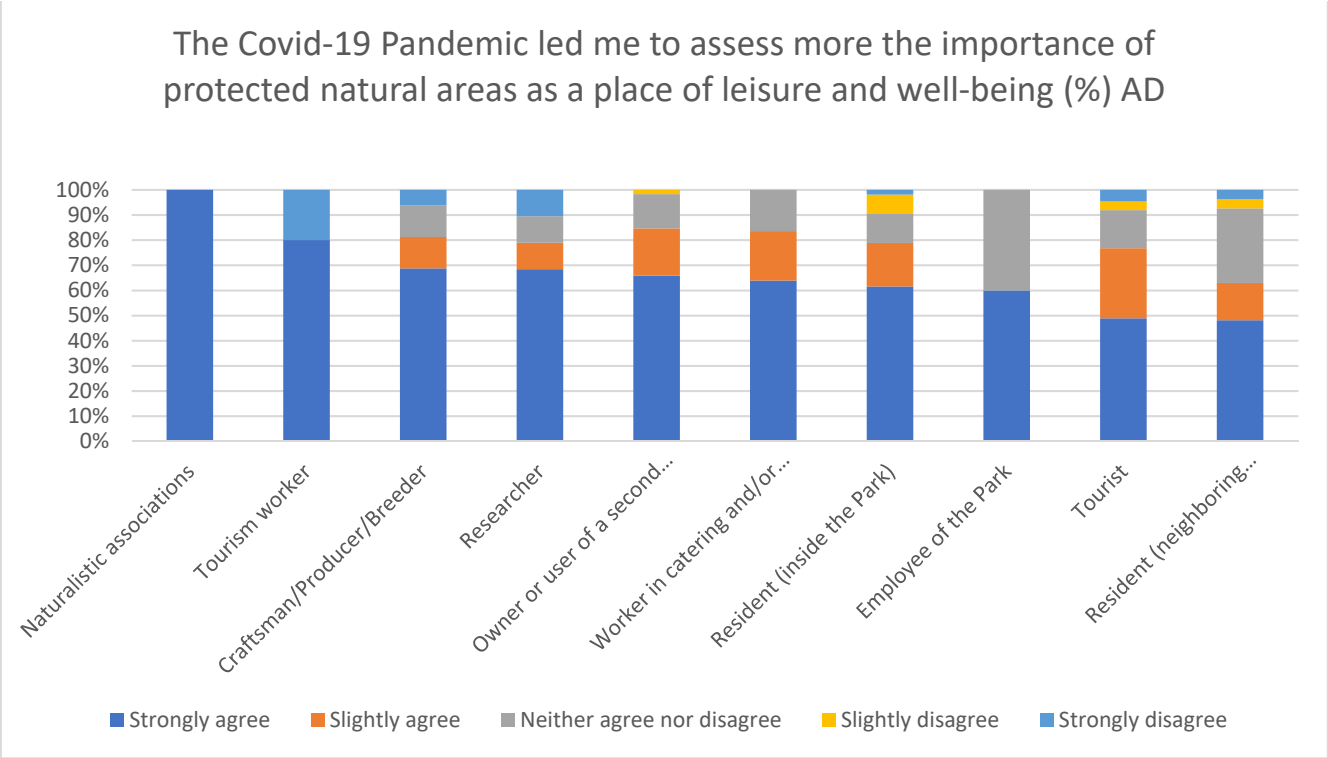


Figure S2 Agreement (in percentage) of the development of a new perception of the PA as a place of leisure and well-being after the COVID-19 at the AD.