

Management Plan for Antarctic Specially Protected Area No. 134

CIERVA POINT AND OFFSHORE ISLANDS, DANCO COAST, ANTARCTIC PENINSULA

1. Description of Values to be Protected

This area was originally designated as SSSI No. 15 in ATCM Recommendation XIII-8, after a proposal by Argentina, as an important example of well developed maritime vegetation having breeding colonies of at least five bird species.

During the XXI Antarctic Treaty Consultative Meeting (Christchurch, 1997), the revised Management Plan for the Area was adopted in accordance with the format established by Annex V and Measure 3 (1997). During the XXV Antarctic Treaty Consultative Meeting (Warsaw, 2002), Annex V having entered into force, the *Site of Special Scientific Interest* No. 15 became, by Decision 1 (2002), *Antarctic Specially Protected Area* No. 134.

The original reasons for the designation of the Area are still relevant. This Area has great scientific value due to its unusual biodiversity, which includes numerous species of birds, flora, and invertebrates. The unique topography of the Area together with the abundance and diversity of the vegetation create highly favourable conditions for the formation of numerous microhabitats which, in turn, support the development of biodiversity and give the Area exceptional aesthetic value.

Long-term research programs could be endangered by accidental human interference, destruction of vegetation and soil, pollution of water bodies, and perturbation of birds, especially during reproductive periods.

2. Aims and Objectives

Management of ASPA No. 134 aims to:

- Protect the biodiversity of the Area, avoiding major changes in the structure and composition of communities of flora and fauna;
- Prevent unnecessary human disturbance;
- Allow the development of scientific research that cannot be conducted elsewhere, and the continuance of long-term biological studies established in the Area, as well as the development of any other type of scientific research that does not compromise the values for which the Area is protected;
- Allow the development of studies and monitoring activities to assess the direct and indirect effects of the activities of the neighbouring station (Primavera Base).

3. Management Activities

The following management activities will be undertaken to protect the values of the Area:

- The Primavera Base staff will be specifically instructed as to the conditions of the Management Plan;
- Movement will be limited to areas free of vegetation, avoiding proximity to fauna, except when otherwise required by scientific projects and the corresponding permits of harmful interference have been obtained;
- Collection of samples will be limited to the minimum required for approved scientific research plans;
- Visits shall be made as necessary to ensure that management and maintenance measures are adequate;

II. Measures

- All signs, as well as other structures erected in the Area with scientific or management objectives, will be adequately secured and maintained in proper conditions;
- Pedestrian paths to research sites will be marked to limit movement.

4. Period of Designation

Designated for an indefinite period.

5. Maps

Map 1 shows the general location of ASPA No. 134. Map 2 shows the ASPA in relation to Danco Coast. The shaded area indicates the group of areas that make up ASPA No. 134 (the subtidal marine environment between the continental and insular portions is not included in the ASPA). Map 3 shows the area surrounding Primavera Base in detail, excluded from ASPA No. 134.

6. Description of the Area

6.1. Geographical co-ordinates, limits, and natural features

Cierva Point (lat. 64° 09' 23''S, lon. 60° 57' 17''W¹) is located on the south coast of Cierva Cove, to the north of Hughes Bay, between the Danco and Palmer Coasts, in the northwestern portion of the Antarctic Peninsula. The site comprises the ice-free area between the southwest coast of Cierva Cove and the northeast coast of Santucci Cove. Also included are Apéndice and José Hernández Islands and the Moss and Penguin Islands, found to the west-southwest of Cierva Point. Although the intertidal zone of each of these areas is included in the Area, the subtidal marine environment is not.

Primavera Base (Argentina) and its associated installations, as well as the beach area utilized for access to the base, are excluded from the Area.

The Area has high species richness of animals and plants, and the abundance of some of these is, in some cases, exceptional.

The cover of mosses, lichens, and grasses is very extensive. The most conspicuous vegetal communities are the associations of dominant lichens, the moss turf dominated by *Polytrichum-Chorisodontium* and the *Deschampsia-Colobanthus* subformation. The moss turves cover areas of more than 100 square metres, with an average depth of about 80 cm. The present flora includes the two Antarctic flowering plant species, 18 moss species, 70 lichen species (two hepatic), as well as 20 species of fungi. The non-marine microalgae, especially on Moss and Penguin Islands, are very abundant with unusual records. Terrestrial arthropods are also very numerous and are occasionally associated with tidal pools in the littoral zone of the Area.

There are twelve species of nesting birds in the Area: Chinstrap Penguin (*Pygoscelis antarctica*), Gentoo Penguin (*Pygoscelis papua*), Southern Giant Petrel (*Macronectes giganteus*), Cape Petrel (*Daption capense*), Wilson's Storm Petrel (*Oceanites oceanicus*), Antarctic Shag (*Phalacrocorax. bransfieldensis*), Pale-faced Sheathbill (*Chionis alba*), Skuas (predominant species *Catharacta maccormickii*), Kelp Gull (*Larus dominicanus*) and Antarctic Tern (*Sterna vittata*).

The most numerous colonies correspond to those of the Chinstrap Penguin (*Pygoscelis antarctica*), Gentoo Penguin (*Pygoscelis papua*), Wilson's Storm Petrel (*Oceanites oceanicus*), South Polar skua (*Catharacta maccormickii*) and Kelp Gull (*Larus dominicanus*).

A summary of the estimated number of nesting pairs by species and nesting site is presented in Table 1.

Species / Nesting Site	Cierva Point	Apéndice Island	José Hernández Island	Penguin Island	Moss Island
<i>Pygoscelis Antarctica</i>	-	-	550	1500	-
<i>Pygoscelis papua</i>	600	900	-	-	-
<i>Macronectes giganteus</i>		<10	-	-	35
<i>Daption capense</i>	<10	23	-	<5	30
<i>Pagodroma nivea</i>	<5	-	-	-	-

¹ Data corresponding to Primavera Base

<i>Oceanites oceanicus</i>	1000	1000	100	100	100
<i>Phalacrocorax bransfieldensis</i>	-	-	21	<10	-
<i>Chionis alba</i>	<5	<5	<5	<5	<5
<i>Catharacta sp.</i>	450	<5	<5	<5	10
<i>Larus dominicanus</i>	160	70	15	<10	120
<i>Sterna vittata</i>	45	15	35	-	15

Table 1: Estimated number of nesting pairs by species an Base d nesting site.

As well, the Area has great aesthetic value. The great diversity in relief and coastal forms, due to the presence of different geologies and a pronounced system of fractures, in addition to an extensive and varied vegetation cover, provide unusual scenic diversity in the Antarctic environment.

6.2. Restricted zones within the Area

None.

6.3. Location of structures within the Area

There are no structures within the Area. Primavera Base (Argentina), located to the northwest of Cierva Point and adjacent to the Area, is only open during the Summer. It is composed of eight buildings and a place delimited for helicopter landings.

6.4. Location of other Protected Areas within close proximity

ASPA No. 152, western portion of the Bransfield Strait (Mar de la Flota), in front of Low Island, South Shetland Islands, 90 kilometres northwest of ASPA No. 134; and ASPA No. 153, eastern portion of the Dallmann Bay, in front of the western coast of Brabant Island, Palmer Archipelago, 90 kms west of ASPA No. 134.

7. Permit Conditions

Entry into the Area is prohibited except in accordance with a permit issued by appropriate national authorities.

Conditions for issuing a permit to enter the Area are that:

- It is only issued for a scientific purpose, in accordance with the objectives of the Management Plan, that cannot be met elsewhere;
- The actions permitted will not jeopardize the natural ecological system of the Area;
- Any management activities (inspection, maintenance, or revision) are in support of the objectives of the Management Plan;
- The actions permitted are in accordance with this Management Plan;
- The permit, or authorised copy, must be carried by the principal investigator authorized to enter the Area;
- A post-visit report is given to the competent national authority mentioned in the permit.

7.1. Access to and movements within the Area

Access to the Area will be by permit issued by a competent authority, and will only be issued for activities which are in accordance with this Management Plan.

There is only one access for helicopters outside of the Area, in the area adjacent to Primavera Base. Helicopters may only land in the specified area to the east-southeast of the Base. The aircraft route to be used is limited to a north approach and departure. The operation of aircrafts over the Area will be carried out, as a minimum requirement, in compliance with that established in Resolution 2 (2004), "Guidelines for the Operation of Aircraft near Concentrations of Birds". As a general rule, no aircraft should fly over the ASPA at less than 610 metres (2000 feet), except in cases of emergency or aircraft security.

II. Measures

Marine access is allowed from any point of the islands included in the Area. Vehicle traffic of any type is not permitted.

Tourism or any other recreational activity is not permitted. Movements within the Area will be carried out avoiding disturbance to the flora and fauna, especially during the breeding season.

7.2. Activities which are or may be conducted within the Area, including restrictions on time and place

- Scientific research activities that cannot be conducted elsewhere and that do not jeopardise the ecosystem of the Area;
- Essential management activities, including monitoring;
- If it is considered necessary for scientific or conservation reasons, access to determined bird nesting sites and mammal colonies may include greater restrictions between the end of October and the beginning of December. This period is considered especially sensitive, because it coincides with peaks in egg-laying for nesting birds in the Area.

7.3. Installation, modification or removal of structures

No additional structures will be built or equipment installed within the Area, except for essential scientific or management activities with appropriate permits.

Any scientific equipment installed in the Area, as well as any sign of the investigation, should be approved by permit and clearly indicated, showing the country, the name of the principal investigator, and the year of installation. All the installed materials should pose the minimum risk of pollution to the Area or the minimum risk of causing disturbance to the vegetation or to the fauna.

Signs of investigation should not remain after the permit expires. If a specific project cannot be finished within the allowed time period, an extension should be sought that authorizes the continued presence of any object in the Area.

7.4. Location of field camps

The Parties that utilize the Area will normally have Primavera Base available for lodging. Only tents shall be installed, with the purpose of housing instrumentation or scientific material, or for employees as a base for observation.

7.5. Restriction on material and organisms which may be brought into the Area

No living animals or plant material shall be deliberately introduced into the Area.

No uncooked poultry products shall be introduced.

No herbicides or pesticides shall be introduced into the Area. Any other chemical product, which should be introduced with the corresponding permit, shall be removed from the Area upon conclusion of the activity for which the permit was granted. The use and type of chemical products should be documented, as clearly as possible, for the knowledge of other researchers.

Fuel, food, and other materials are not to be stored in the Area, unless required for essential purposes by the activity authorized in the corresponding permit.

7.6. Taking or harmful interference with native flora and fauna

Any taking or harmful interference, except in accordance with a permit, is prohibited. When an activity involves taking or harmful interference, these should be consistent with the *SCAR Code of Conduct for the use of Animals for Scientific Purposes* in Antarctica as a minimum requirement.

Information on taking or harmful interference will be exchanged through the System of Information Exchange of the Antarctic Treaty, and its record should be incorporated, at the least, into the *Antarctic Master Directory* or, in Argentina, into the *National Antarctic Data Centre*. The researchers that take samples of any kind will show that they are familiar with previous collections to minimize the risk of possible duplication.

7.7. Collection or removal of anything not brought into the Area by the permit holder

Any material from the Area may only be collected and removed from the Area with an appropriate permit. Collection of dead biological specimens for scientific purposes should not exceed such a level that the collection degrades the nutritional base of local scavenger species.

7.8. Disposal of waste

Any non-physiological waste shall be removed from the Area. Residual waters and domestic residual liquids can be discharged into the ocean, in accordance with Article 5 of Annex III of the Madrid Protocol.

Waste resulting from research activities in the Area can be temporarily stored at Primavera Base until it is removed. Said storage should be carried out in compliance with Annex III to the Madrid Protocol, marked as trash, and appropriately closed to avoid accidental losses.

7.9. Measures that may be necessary to ensure that the aims and objectives of the Management Plan continue to be met

Permits may be granted to enter the Area to conduct biological monitoring and inspection activities, which may include the collection of samples of plants and animals for research purposes, the erection and maintenance of signs, or other management measures. All the structures and markings installed in the Area for scientific purposes, including signs, should be approved in the permit and clearly identified by country, indicating the name of the principal investigator and the year of installation. All signs and structures should be removed when, or before, the permit expires. If a specific project cannot be finished within the allowed time period, an extension should be solicited to leave objects in the Area.

7.10. Requirements for reports

The main permit holder, for each permit and once the activity has finished, shall submit a report of the activities conducted in the Area, using the format previously turned in together with the permit. The report should be sent to the permit issuing authority.

Records of permits and post-visit reports relating to the ASPA will be exchanged with the rest of the Consultative Parties as part of the System of Information Exchange according to Art. 10.1 of Annex V.

The permits and reports should be stored and made accessible to any interested Party, SCAR, CCAMLR, COMNAP, so as to provide necessary information of human activities in the Area to ensure adequate management.

II. Measures

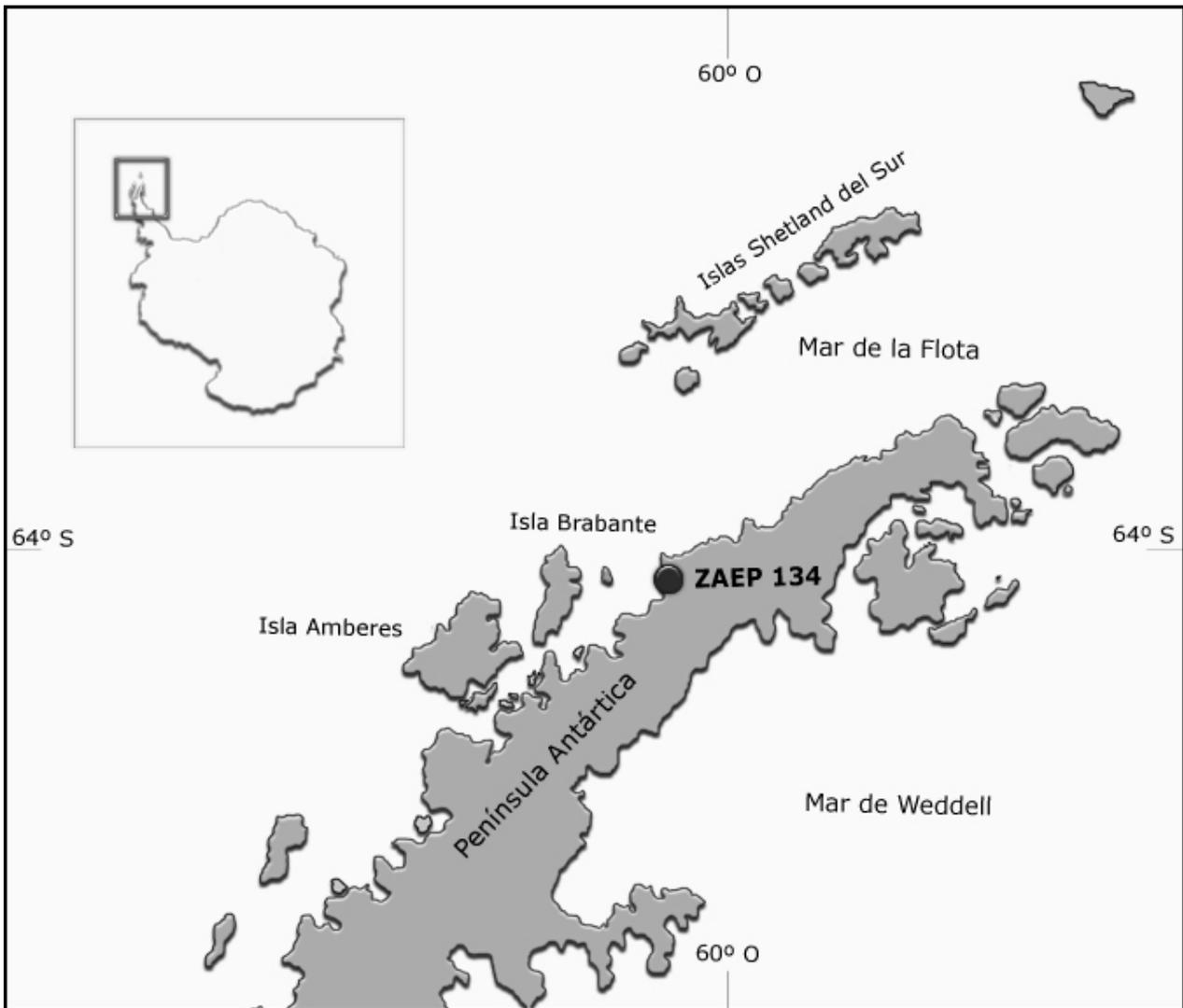


Figure 1: General location of Antarctic Specially Protected Area No. 134, Cierva Point and offshore islands, Danco Coast, Antarctic Peninsula.

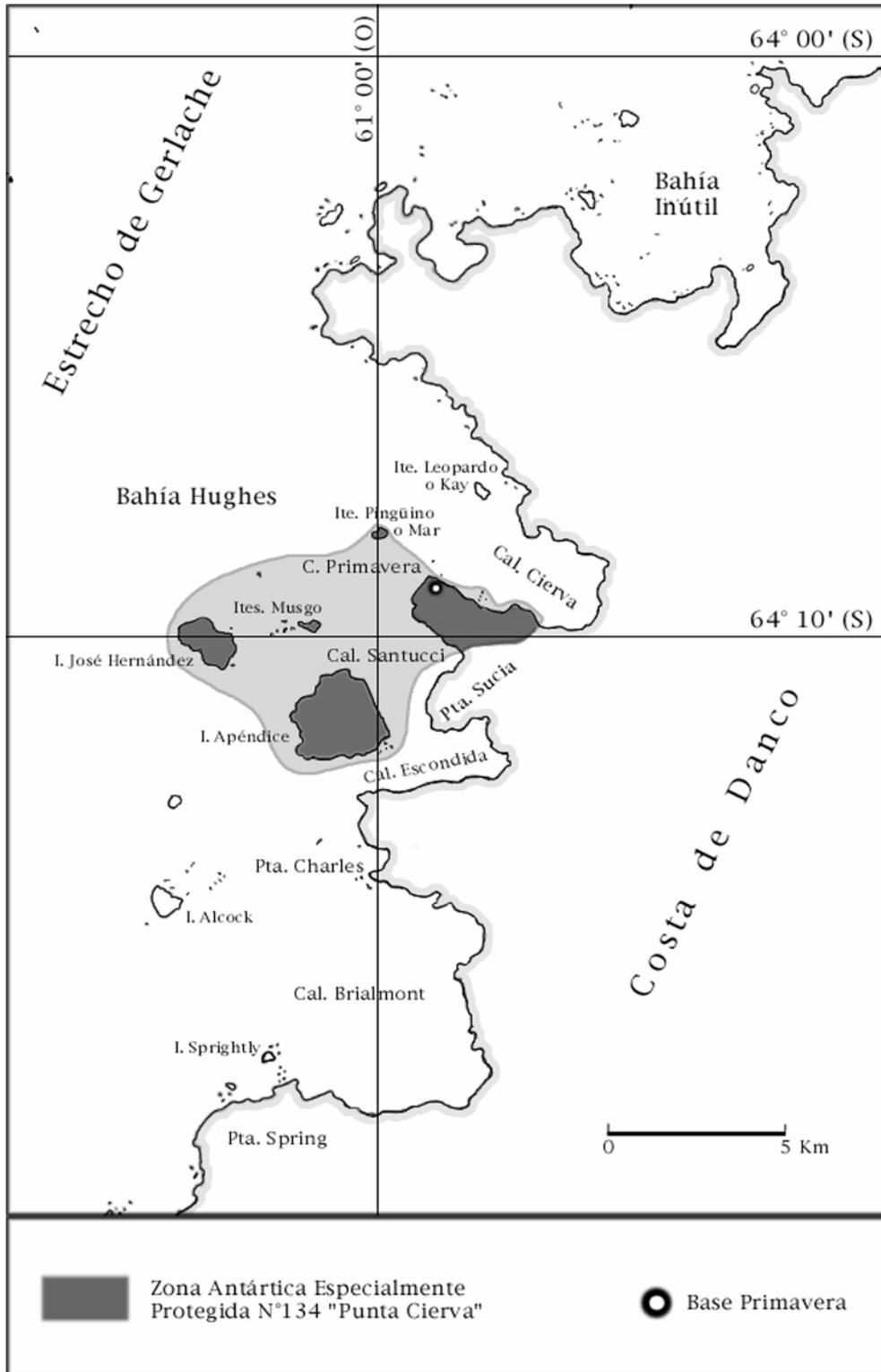


Figure 2: Antarctic Specially Protected Area No. 134, Cierva Point and offshore islands, Danco Coast, Antarctic Peninsula. In shading, the group of areas that make up ASPA 134 (the subtidal marine environment between the continental and insular portions is not included in the ASPA).

II. Measures

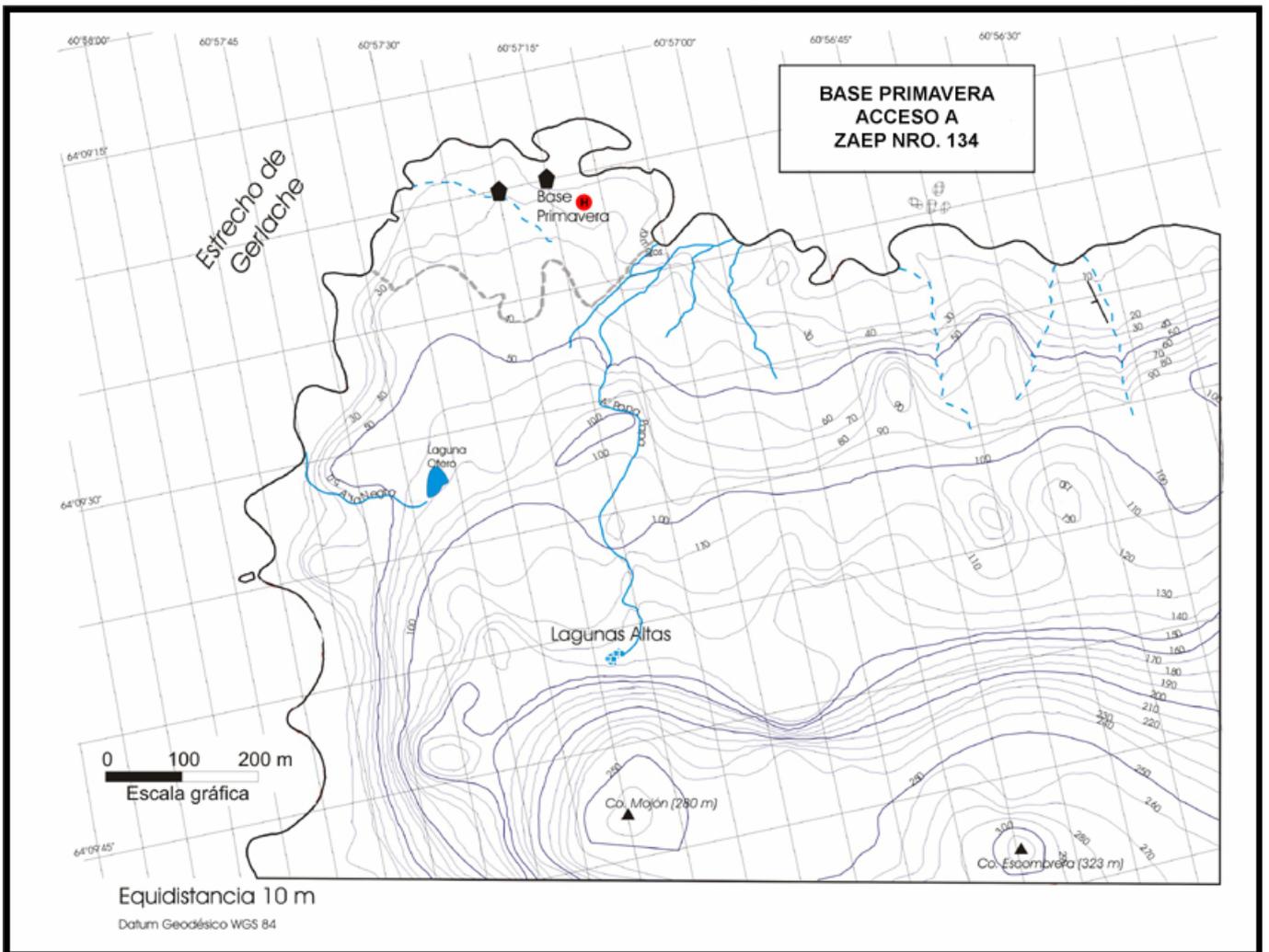


Figure 3: Area of Cierva Point that includes Primavera Base (the grey pointed line above the 40 m contour line indicates the base area, excluded from ASPA No.134).