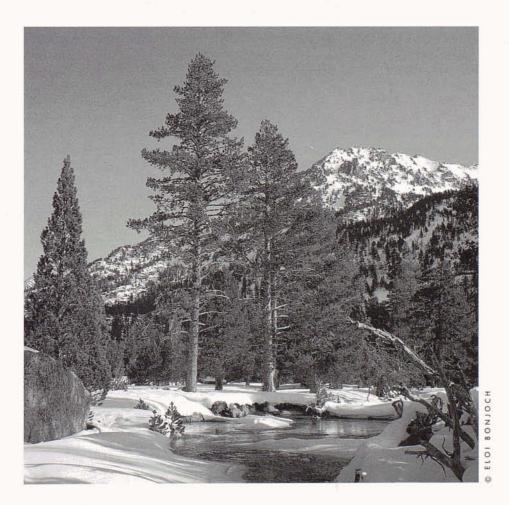
THE NATURE RESERVES OF CATALONIA

THE NEED TO EFFECTIVELY PROTECT CERTAIN PARTS OF THE TERRITORY IS FAIRLY RECENT AND STARTED TO EMERGE IN THE MORE INDUSTRIALIZED COUNTRIES, LARGELY BECAUSE THE EFFECTS OF THE INDUSTRIAL AGE ON MAN'S RELATIONSHIP WITH NATURE LED TO HITHERTO UNSUSPECTED ENVIRONMENTAL DANGERS.

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DOSSIER:SUMMER

ny country that sets out to achieve a rational organization of territory and a sensible exploitation of its resources will eventualy decide to protect a certain part of its surface area and to take measures to protect the flora, fauna and landscape and prevent a number of human activities which could have an adverse effect on them, while encouraging those that contribute to study, relaxation and enjoyment. In referring to these protected areas, we use the term nature reserve or some such similar expression. We can see the wisdom of this kind of legislation if, instead of looking on these areas as green islands in the midst of generalized chaos, we place them within the context of an overall plan which respects the environment everywhere and at all times.

The need to effectively protect certain parts of the territory is fairly recent and started to emerge in the more industrialized countries, largely because the effects of the industrial age on man's relationship with nature led to hitherto unsuspected environmental dangers.

In Catalonia, there is a deep-rooted fondness for those places where nature has been especially generous. This is amply borne out by the popularity of excursionist associations or the fact that a considerable number of people devote themselves to the study of such subjects as geography or botany. However, in spite of a few attempts and a few unkept promises regarding certain areas (Montseny, Garrotxa) and which go back to the beginning of the century, the existence of reserves in the normal sense of the word is a very recent phenomenon. In fact, the first, faltering but determined steps were taken by the provincial deputation of Barcelona in 1963, and the establishment of a relatively extensive network of protected areas only became possible after the restoration of the Generalitat and the Catalan parliament. At the first opportunity, our institutions set to work to satisfy the aspirations which the more progressive elements in the country had nursed for so long.

In this article, the areas which are at present protected are presented under four headings, according to their location or their characteristics (the reserves of the *País Valencià* and the Balearics have been deliberately omitted, as they deserve an article of their own).

CLOSE TO LARGE URBAN CONCENT-RATIONS

Sant Llorenç del Munt. Straddling the regions of Western Vallès and Bages, al-







most next door to Sabadell and Terrassa. A typical, characteristic example of this kind of geographical configuration (similar to Montserrat) made up of conglomerates, with important underground water systems that give rise to caves and potholes. It has an information centre and other installations. Set up and run by the Barcelona Provincial Deputation.

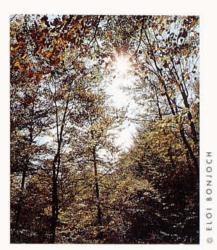
El Montseny. It is the largest and highest massif of the Catalan Prelittoral Range. This gives it an extraordinary range of floral zones, from the Mediterranean holmoak woods in the lower parts to the clumps of fir near the summit, passing through a splendid belt of deciduous woodland of beech and oak. Since time immemorial, Montseny has been settled with care and moderation: the importance of maintaining the present balance was a crucial factor in UNESCO's decision to declare the area a Biosphere reserve in 1978. At present, it is the only reserve of this kind in Catalonia. Set up and run by the Barcelona and Girona Deputations, it has a network of installations which includes nature schools, museums, reception centres, camping site, etc.)

Garraf. The principal characteristic of the Garraf mountain is its karstic relief -possibly the most remarkable in Catalonia with potholes, caves, etc. This gives it a sparse vegetation which often makes it look barren, especially in the higher regions. Besides this, it has undergone all sorts of deterioration (quarries, rubbish dumps, military installations, housing developments, etc.) The Barcelona Deputation's decision to set up a park there was mainly in response to the need to preserve what is left of it (with such remarkable features as the most northerly palm trees in Europe) and to save it from further assaults, rather like looking after the venerable remains of a half-ruined castle. It has an information centre.

Collserola. The city of Barcelona is built at the foot of the hill and even stretches up its south-eastern face, while the other face still preserves a dense Mediterranean vegetation. Here, more than anywhere, one is made aware of the social value of these protected areas. Set up by the recently abolished Metropolitan Corporation, it is at present run by a foundation which is about to inaugurate a reception and service network.

SEASIDE WET ZONES

The Ebro Delta. The most important wet zone in the Països Catalans. Apart from its agricultural value (market gardens and TRAVEL



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rice plantations), the area is unique for its natural aspects, especially because its fresh- and salt-water lagoons are breeding grounds and stop-overs for many species of birds. At the same time, there are important populations of amphibians, reptiles and fish; shoreline trees and belts of halophyte vegetation; extensive areas of sand dunes; not to mention the magnificent meeting of river and sea. Set up and run by the *Generalitat de Catalunya*, it has an information centre, ecomuseum, bird observatories, etc.

The Empordà marshlands. The reserve is situated on the gulf of Roses and is made up of a series of coastal or quasi-coastal marshes (known as *llaunes* by the locals) between the final stretches of the rivers Muga and Fluvià. It is outstandingly rich in birdlife. Set up by the Catalan parliament, it has an information centre, the lake school and bird observatories.

A SINGULAR LANDSCAPE

The volcanic zone of the Garrotxa region. In this region, and especially around the town of Olot, we find the most important volcanic zone of the Iberian Peninsula, with some forty volcanic cones of the Stromboli type and some twenty basalt columns. The rainfall in Olot is exceptionally high (1100 mm) which means that in the volcanic area there is a thick, protective layer of vegetation and such outstanding spots as the beechwood known as *la fageda d'en Jordà*. The reserve was set up by the Catalan parliament and has a range of installations of interest to the visitor. *Montserrat.* The geomorphological configuration of Montserrat is known around the world and is typical of the type of relief known precisely as Montserratine. It has a surprisingly lush vegetation, though unfortunately 60 % of it was destroyed by fire in 1986. There is no need now to go into the symbolic value of the mountain, which has decisively influenced its preservation through the ages. Nevertheless, in 1950, a commission was set up to watch over it and, a few months after the fire, the *Generalitat* set up the Montserrat nature reserve, which is run by the former commission.

THE PYRENEES

Aigüestortes-Sant Martí. Situated at the confluence of the Vall d'Aran, Pallars and Ribagorça regions, it is one of the most fascinating high mountain regions in Catalonia, with all the usual ingredients: almost permanent snow, hundreds of lakes and lake cirgues, rivers where rapids alternate with placid meanderings (Aigüestortes means "crooked waters"), a beautiful cloak of conifers, green prairies, the burst of flower in spring, etc. It was set up by the Spanish state administration in 1954, though no really effective measures were taken. Its administration has been disputed and it seems that the Generalitat will finally take it over. It has information services.

Cadí-Moixeró. This is the most important southern pre-Pyrenean system and the largest of the reserves that now exist in the *Principat.* Amongst other things, it is outstanding for the abruptness of its relief, especially spectacular in the case of Pedraforca.

L'Albera. This is the name given to the easternmost part of the Pyrenees, not including the Cape Creus. In the Empordà region, not all the massif is protected, but only those areas that the *Generalitat's* decree considered to be the most important in terms of flora and fauna. The northern face, which comes under French administration, includes the Maçana nature reserve, which has been protected since 1973. It is a splendid beechwood situated at a discreet height (700-900 m) and some 8 kilometres (5 miles) from the sea, as the crow flies.

Carlit, Canigó, Madres. Although this article is chiefly concerned with the protected areas of autonomous Catalonia, while speaking of the Pyrenees, one cannot help mentioning these three massifs, of undeniable interest to naturalists and protected by French legislation.

These are the most important protected areas of Catalonia and the outlook is very encouraging, especially if we compare the situation with that of ten or fifteen years ago. There is still a long way to go and many other areas are equally worthy of being considered as possible candidates for protection. Certain abuses still affect areas which are legally protected and this must be stopped. More than anything, a much larger budget is needed if the reserves are to be equipped with the necessary facilities and protection. Nevertheless, I would like to end by saying that the fact is that we finally have nature reserves and that the citizens of Catalonia or visitors to the country can take advantage of them for their instruction and leisure.