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STEERING COMMITTEE
FOR THE CONSERVATION AND
MANAGEMENT OF THE ENVIRONMENT
(CDPE)

COMMITTEE OF EXPERTS - PROTECTED AREAS

TEIDE NATIONAL PARK

EUROPEAN DIPLOMA

APPLICATION FORM

12.461
09.3

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1. Type of land, site or natural monument

The Teide National Park was created by decree on 22 January 1954 under the protection of the National Parks Law of December 1916. Initially comprising an area of 11 000 hectares all of which belonged to the municipal district of "La Orotava"

The Canaries are famous for the singularity of their plant and animal life, due to a number of factors. They are situated off the north-west coast of Africa, having emerged as volcanic islands from the Atlantic Ocean. They are under the influence of the cold Canary current and the north-east wind, which brings moisture to the lower areas of the isles that would otherwise be desert. The relief and shape of the isles, combined with the action of the wind, bring about the existence of a great variety of sub-climates within each isle, which are, in turn, reflected in as many different natural habitats.

Thus, it may be said that each island is a miniature continent where by either skirting or climbing it, one comes across a succession of different contrasting panoramic views.

The age of the Archipelago (approximately 40 million years), its isolation and the diversity of habitats, have favoured the conservation and evolution of the fauna and flora that originally drifted to the isles, so that, at present, there exists a number of unique endemical species which have for long been the wonder of the scientific world.

The Teide National Park is situated in the centre of the island of Tenerife, includes a great cirque known as Las Cañadas and the Teide, in the highest mountain in Spain (12 198 ft - 3 717 m). The whole zone is at an altitude of over 6 000 ft - 2 000 m, having an area of approximately 33 000 acres - 13 500 ha - which makes it the fifth of Spain's national parks in size.

The park, embedded in the heart of the "Macaronesia" - is situated in the highest zone of the region which represents the natural environment of the "PISO - SUPRACANARIA", an area characterised as being at an average height of over 1 800 metres SMN (Servicio Meteorológico Nacional) with a volcanic superstructure, essentially of basalt, tracyte and phonolytes and a mountain climate characterised by extreme variations in temperature, low rainfall, dry atmosphere and strong winds.

It is an almost uninhabited area, covered by a xerophilous mountain coppice which is highly adapted to the reigning rigorous conditions and with a degree of endemicity 80% higher than for the known spermatophytes, which places it in one of the leading positions in the world concerning these characteristics.

The vertebrate fauna is not as rich, but the invertebrate, although still unstudied, presents a high number of species, approximately 400, along with a high degree of endemisms.

The human traces in the park, to which it has always been linked, although never in a permanent way, and which scarcely produced any damage, is manifested in a very interesting form, by the extraordinary abundance - the

greatest density of all the island - of archaeological deposits, which offer an exceptional study area, of the environment and lifestyle of the first inhabitants of the archipelago, other types of document which refers to the existence of these men.

2. Scientific, aesthetic, cultural and/or recreational characteristics and interest which justify protection

2.1 Scientific interest

It is very high given the geographical position and the characteristics of the physical environment, that make the park a unique place in the world. There will follow a more detailed analysis of the reasons that arouse interest to this land in the different branches of science and in archaeological investigation.

2.1.1 Geological interest

The formation of Las Cañadas cirque probably took place about 300 000 years ago, while the Teide still continues to emerge. The latest historical eruption which took place within the park, corresponds to Chahorra, which in 1789 threw out lava through a number of vents known as "Las Narices del Teide" (Teide's noses).

The Teide is formed by a number of different volcanoes which have been superimposed through time. Outstanding are Chahorra or Pico Viejo, at an altitude of 10 191 ft (3 106 m), and a crater of 2 600 ft (800 m) diameter and El Pilón, spot height of the mountain (12 198 ft) whose slopes and a 260 ft (80 m) diameter crater, shows signs of residual activity in the form of "solfataras", which eject a gas at a temperature of 86^oC.

The old caldera Las Cañadas, is full of all kinds of volcanic material which brings about a mixed landscape, where lava outflows sometimes form vast fields of scoria, called "malpais" or "volcán", flow down slopes forming long lava streams, or appear over other older volcanoes or overflows as spits of lava.

Small volcanic cones of almost perfect structure are found in the park, the crater wall being more elevated on the side from where the wind blew at the time of eruption due to ash accumulation (eg Montaña Mostaza).

Thus the geological interest is high due to the following fundamental reasons:

- a. It is a volcanically active area with a potentially high risk which constitutes an exceptional experimental field for establishing an analysis of determined endogenous processes, and helping the prevention of eruptions.
- b. The old Teide-Pico structure is the only recent stratovolcano with which to compare its deep structure, magmatic evolution, eruptive mechanisms etc, with the large structures of other active volcanic regions.

- c. The variety of structures, stratovolcanoes, caldera, domes, plugs etc, along with materials, basalts, trachytes, phonolytes make this National Park a privileged place for the study of volcanic phenomena.

2.1.2 Geomorphological interest

The Teide National Park is the most representative example of the volcanic geomorphology of the Canary Islands. An enormously important synthesis of the different morphoclimatic types imprinted with the vestiges of former climates, reliefs in which forms created by erosion and by depositing are intermingled along with those forms created through eruption.

The different effects produced by erosion on the volcanic rock makes any regularity in the forms of differential erosion unlikely, but what does exist is a clear articulation of the forms. For example, in the selective brushing of the embedded rock which leaves dikes and sharp points of rock exposed. Among the factors which most influence the shaping of these forms are:

1. The height of the structure upon relatively small surfaces, with a disproportion between vertical and horizontal expansion.
2. The role of the network of tectonic fracturing caused by volcanic action, which control the forms of erosion.
3. Radical disjunction and incoherence of the volcanic materials which tend to favour its fragmentation and removal, and a general permeability of the grouping which is only held back by dikes and deposits of red ochre. The undersurface run off is weakened and favourable conditions for movements in the slope are created.

The structure of the Cañadas was built in a cycle of eruptions with a great emission of materials. These emissions, which came from independent centres, originated a large structure of fissures in which it is possible to distinguish different phases, making up the wall of the present-day caldera.

El Teide and Pico Viejo constitute a double volcano, a unique structure, the elements of which run into each other from their craters, going from the North East to the South West following a fissure within the basic orientation of the island. This is like a reinitiation of the eruptive activity, with a magmatic continuation after the collapse. The construction of this structure closed the caldera, transforming it into an enclosed detrital ("endorréica") area, and displacing the axis of the highest parts of the island. There exist other medium-sized and small volcanic structures that rise in short eruptions that appear isolated or forming volcanic fields. Two important groups are situated to the North East and North West of El Teide, Pico Viejo being among them. A group of domes which were created later (even recently) complete the topography of El Teide and Las Canadas.

A characteristic morphology of snow fields in subtropical highlands can be seen in the case of "Los Penitentes", the existence of which in this zone contributes to its inclusion within a particular morphoclimatic ambit, and reaffirms the conclusion about periglacial conditions in high Tenerife.

"Los Penitentes", according to Lliboutry, only appear in those snowy regions which experience a long dry period, clear skies and cold dry air; that is, the typical climatic characteristic of subtropical highlands.

The existence of "Los Penitentes" implies environmental conditions which, along with the periglacial forms - polygonal surface features and forms of solifluction, in Montaña Rajada (2,500 m) - allow the clarification of one of the most interesting morphogenetic systems of El Teide and Las Cañadas.

2.1.3 Atmospheric and astronomical interest

Astronomic interest which will be intimately linked to the climatic characteristics of the area, above all the astronomic quality, of the Canary Islands has been demonstrated since the 18th century. Newton in his treatment of Optica (1-30) said: "Telescopes cannot be so well built as to clearly distinguish the confusion of images produced by atmospheric vibration. The only solution is serene and still air, which can be found in the heights of the highest mountains above the thickest clouds."

In 1856 the astronomer Charles Piazzzi Smith put into practice this advice, moving to Tenerife and making observations during two months in Guajara, effectively testing the advantages of these mountain observatories.

Astronomic observations continued in the 19th and 20th century when Jean Mascart, astronomer with the Paris observatory was so satisfied that he proposed the creation of an international observatory in Guajara, but the first world war put an end to that idea.

In 1959, owing to a total eclipse of the sun, numerous astronomers from all over the world visited the Canaries and returned to awaken interest for the setting up of a permanent observatory, commencing with the study of astronomic conditions of Izana, arriving at the conclusion that zones above 2 000 metres gave optimum conditions.

Through no small effort, in 1970 the Teide observatory was inaugurated.

The "astronomic quality" includes many factors which could be grouped thus: logistics (geographic positioning, accessibility, communication, etc) and astronomic (cloud scarcity, weak winds, high atmospheric transparency, optical stability and nocturnal darkness).

The position of the Canary Islands, far from the tropical squalls where the polar winds arrive weakened and with the smooth system which places a layer of stratocumulus at an altitude of 1 500 metres, offers an almost laminar wind system above 2 000 metres (the area in which the Teide National Park is found), and therefore ideal conditions which do not deteriorate the quality of the telescopic images, the quality of solar photography is comparable to those taken outside the atmosphere.

2.1.4 Botanical interest

The particular environmental conditions that characterise the natural surroundings of Teide National Park (low precipitation and relatively little moisture, strong and quick variations in temperature, intense ultraviolet radiation, violent wind action, poorness of the soils), mean that the

vegetation that grows there has to avail itself of special adaptations in order to be able to survive. If one adds to this the fact of being on an island, the result is a high incidence of endemism which the flora of the park has to, and does, possess. As can be seen from chart I, this incidence is one of the highest in the world and, of course, is not exceeded by any other European flora.

If we exclude the species that have been introduced, the number of spermatophytes that constitute the autochthonous flora of the park can be put at around 54, of which at least 45 are taxa endemic to the Canarian Archipelago. It is impossible to give an exact figure because, just as there are some species that have certainly been introduced, there exist others, distributed beyond the Canarian Archipelago, about which it is not proved whether they are native or alien. In any case, this would scarcely alter the overall results. Nevertheless, when speaking of the widely distributed species it is necessary to bear in mind that some of them, especially some pteridophytes, are Euro-Siberian, which increases the biogeographic interest of the Park's vegetation. 84% of the spermatophytes of the park are endemic to the Canaries, 46% of them are endemic to the eco-system which this area enjoys and 21% are endemic to the national park itself or its surroundings, though with large populations in the interior. Out of all of them, 15% qualify as E - that is, in danger of extinction - and another 15% are in category V, from which it is possible to say that at least 30% of the species are endemic and are in some danger of extinction.

The taxonomic interest is enormous, since species new to science are still being discovered (there exists one currently going into print, the one prior to that being Helianthemum juliae Wildpret, 1986) among the higher plants, with the other groups having been very little studied (mainly bryophytes and lichen), from which surprising results can be obtained.

It can be said without exaggeration that the botanical interest of the area is first class. Appended is a chart which gives the proportion of endemic species of the park, of the Canarian superstratum and of those present in the Canarian Archipelago. In addition, the chart also gives the category in accordance to the list of rare, endangered and endemic plants published by the Council of Europe.

In the list appended, the endemic species of the park have been put together, arranged in three groups: endemic species exclusive to the park, species endemic to the Canarian superstratum (including the park) and those species endemic to the Canarian Archipelago (this includes some species which although they belong to the previous category, extend to a greater or lesser degree to adjacent areas).

2.1.5 Zoological interest

The majority of the fauna of the park is made up of invertebrate arthropods and, above all, insects. The high percentage of endemic species, from the biogeographical region of the islands as well as those restricted to the park itself, lends great value to this fauna which is so characteristic and particular, and still so little known.

The fact that these oceanic islands are natural laboratories, when added to the clearness of the evolutionary and biological processes, along with the fragility of the island eco-systems, endorses and increases - if that is possible - this great value that the park possesses.

The singularity of the climate of the area of the park determines a particular and rare phenology among certain groups of insects widely distributed on the island. There appears a phenological inversion at altitude, with the action here (2 000 - 3 700 m) of limiting factors different from those in operation lower down.

The phenology also varies among the different species of the park, since although the greatest activity occurs in spring and early summer, some species show most activity well into the summer as is the case with Phyllodromica hivittata and Colliptamus plebeins. On the other hand, Lepthyphantes sp. is more active in the colder months (end of the year, winter). Other species like Dolicho vossleri and Guanchia uxoris prefer the milder months, that is, spring and autumn (CAMPOS, 1986).

Of particular interest are the numerous specialisations and adaptations that can be observed in certain species in order to survive in an adverse environment. Thus, one can give the example of the existence in the highest zones of a high proportion of carnivores that feed on air plankton coming from lower altitudes. Also there are many species with nocturnal lifestyles belonging to groups in which this is not normal. They develop anti-freezing physiological mechanisms in order to withstand the low night temperatures, being unable to survive the fierce sun by day. The greatest number of adaptations is presented without doubt by the cave-dwelling species. Deserving special interest are the "troglobios". Adaptations include: the loss or diminution of sight, diminution of pigmentation, shaping and lengthening of corporal appendices and teguments, slowing down of the metabolism, sharpening of the sense of smell ... (MARTIN ESQUIVEL, 1983).

The vertebrate fauna of the park is limited and not very particular. Only the reptiles, some birds and, among the mammals, the Chiropteras, show a certain amount of endemism in the islands.

The bird fauna of the park is represented by a certain number of species, of which three are endemic to the "macaronesia", the rest being considered in the process of becoming island species, presenting insular varieties. All of them are widely distributed species, common to dry zones, from the lowest parts of the island up to 3 700 m.

Appended are two accounts of the main groups, species and sub-species of arthropods of the park, showing their degree of endemism. Also attached is a chart about the vertebrates in which are also shown their status and number in the park.

2.1.6 Archaeological, anthropological and ethnographical interest

There are numerous remains of the habitats used by the guanches (the aborigines) in Las Cañadas. They vary on the geological and geographical conditions of the zone. It is, therefore, the terrain which conforms and imposes its constructive characteristics. Two types of habitation may be distinguished: cave habitat and surface habitat.

The first are built against rocks and protecting blocks, around which stone walls are erected.

The second type is of totally artificial construction, without the support of any natural projection.

In these dwelling places, caves or shelters, there appear various archaeological objects such as chips of obsidian, varying greatly in shape and size, fragments of pottery, chips of basalt and phonolite, bits from mills, polished porous stones and some limpet shells.

The aboriginal burial places that have been found in Las Cañadas del Teide were arranged according to their customs, which is why they show characteristics identical to other necropolis of the island. The aborigines buried the bodies in caves and, one can distinguish between individual and group burials from the number of inhumations carried out. There are group burials (in large caves and volcanic tubes) and individual burials in crevices and cavities.

In general, it can be said that the number of archaeological sites in Las Cañadas is very high, being characterised by:

- a. Good conservation of archaeological remains, due to the climate of the zone - above all the lack of moisture in the site - and the non-existence of permanent human settlements in the zone, which has assisted the preservation of its environment;
- b. The great variety of archaeological remains, which allows for their exhaustive study;
- c. The wide distribution of the remains in Las Cañadas, although there is a certain concentration of them in caves, plains and ravines near springs and sources of water.

These characteristics mean that the Teide National Park has a great interest in terms of Canarian archaeology, since from it comes the greater part of the archaeological remains of the island of Tenerife. These remains are vital to a knowledge of the island's pre-Hispanic culture. These days, little survives of this culture except the archaeological remains and some documentary, toponymic, anthropological and ethnographical topics. For this reason the primary source of knowledge about it is archaeology. This discipline has to be related to others which can add interesting data in the interest of the achievement of a complete knowledge of the lost aboriginal culture.

2.2 Aesthetic interest

It is great due to the high scenic value and ample panoramas it offers, being able to see the circle of Las Cañadas (one of the largest in the world, with a diameter of 17 km) quite well, from the foot of its impressive slopes, or in its entirety, from the peak of the Teide.

It has also got a high landscape value and, with the exception of a few problems whose reparation is in hand, actually presents a very acceptable state of landscape conservation.

2.3 Cultural interest

Has always been great, for all the Canarians who have always held a special relationship with the high part of Tenerife, the Teide is the symbol of personal and national identification, spontaneously felt and transmitted from generation throughout the centuries.

Moreover, for its own characteristics, it has a recreational and education potential of the highest magnitude, whose development and promotion specially interest the administration of the park.

2.3.1 Traditional cultural interest

The great cultural interest of the park stems from the fact that a series of traditional human activities of great anthropological, ethnographical, archaeological, historical and scientific interest have been carried out there. Most prominent among these activities is the grazing of animals along with the gathering of broom brushwood, bee-keeping, the digging of pumice stones, sands and sulphur, and the collecting of ice. In addition, the territory that belongs to the national park has been considered a suitable place for astrophysical observations and an attractive place for visitors - thinking above all in terms of those who come with obvious scientific interest in the summit of the island.

2.3.2 Educational and interpretative interest

The high degree of interest which is presented by the Teide National Park for the interpretation and education of nature is endorsed by two fundamental factors. On one hand its exceptional geological characteristics which convert this piece of land into a privileged place for the understanding of such a spectacular phenomenon as volcanism, and the gradual establishment of life forms in the terrains affected by this which perfectly show us such processes as vegetable colonisation and succession.

On the other hand, almost one million of the visitors are received by the park annually, and through their visit can extend not only their knowledge of nature but also through it they understand global processes which help to affect a change of attitude towards improving their sensitivity and encouraging, in general, a greater respect for the environment.

3. European interest which justifies the candidature

Not only do the characteristics put forward above put the Teide National Park among the places in the world that most need an effective and genuine protection but its geographical position is also important. Spain, in particular, and Europe, in general, have direct responsibility for the area.

The great European interest in the park stems not only from its position in the "macaronesia", where there are other European enclaves. Its fundamental importance is that it is in the most varied archipelago with the greatest diversity of biotopes to be found in the region. It is also the only true sub-tropical highland zone in Europe with all that that means in terms of richness of biology. The enormous genetic patrimony that the zone possesses should not be forgotten; the very high percentage of plant and animal species, along with the other factors that make it unique in the world.

Furthermore, one must remember the characteristic elements of the physical environment as, for example, the continuance of an extraordinary presence of volcanism which are so rare elsewhere on the continent of Europe.

These considerations, when put together, demand an international recognition of the natural merits that the Teide National Park possesses. With this, it is hoped, essentially, to reinforce the line of protection maintained up to the present moment until such a time that the bodies and governments involved in its running, should be obliged to lend greater attention to a place for which all measures might be brought together in order to continue its study and protection and increase our knowledge of it, which will never be too many.

4. Description of geographical position and/or sketch or outline on a map

Annex No. III includes a brochure with general information about the park where a detailed map (E. 1:30 000) of the national park and an outline of its situation in the Canarian Archipelago can be found (available at the Secretariat).

5. Photographs illustrating typical aspects of the natural area

Annex No. IV includes a set of photographs which shows the most characteristic aspects of the park (available at the Secretariat).

6. Conservation measures taken so far or contemplated

Annex No. V includes the capital legislative or statutory texts which directly or indirectly govern the national park.

Among them, the Act of 5/1981, of reclassification of the Teide National Park and the Royal Decree of 2324/1984 of 14 November, which approves its management plan, are the most interesting.

7. References to published descriptions

Already during the 14th century, and especially during the 15th century, chroniclers began naming and describing the Teide Park. A little later, after the 17th century, these kind of descriptions - as well as the trips of some researchers and scientists to the Canary Islands - became more and more frequent and in-depth, keeping that increasing interest till today as is shown by the intense scientific and cultural work done in the area.

All that activity has produced an enormous number of papers and books that, in some way, deal with the territory that today represents the Teide National Park. Some of them are monographical texts while others consider it as a second level subject.

Although considering the preceding kinds of works, it could be referred almost to half a thousand published books and articles related to the park; those which deal with it in a more marginal way have not been included in the list presented in Annex No. VI.

SERVICES OFFERED BY THE PARK

Information

Detailed information may be obtained at the "Centro de Interpretación del Parque", just by the "Portillo de la Villa". There, visitors will find a small museum consisting of geology, botany, zoology and archaeology. In the theatre, there are frequent showings of explanatory programmes about the park.

Information may also be obtained from the "Parador Nacional de Turismo", access control of "La Cañada del Capricho", and from the "Cuartel de Servicios del Sanatorio". For more detailed information, one must go to the Provincial headquarters of ICONA (Santa Cruz de Tenerife, Avda. de los Reyes Católicos No 31, Tel: 21 66 11 and 21 64 00).

From sunrise until 4.00 pm, there is a permanent cable car service, which goes from the foot of the Teide (7 546 ft - 2 300 m) to La Rambleta (11 664 ft - 3 555 m) in eight minutes, from where, by a short 25 minutes climb by foot, one may reach the peak.

There are first aid units at the "Centro de Interpretación", Parador Nacional, Cable Car Station, Barracks of the Guardia Civil, Parks Services Centre and Altavista Refuge.

We advise visitors not to stray off marked footpaths and to equip themselves with strong footwear that are adequate for the terrain.

APPENDIX IFLORAENDEMIC CANARIAN SPECIES FOUND ONLY IN THE PARK
AND ITS IMMEDIATE SURROUNDINGS.

	<u>Rg</u>
<u>Bencomia extipulata</u> Svent.	E
<u>Carex paniculata</u> L. <u>ssp. calderae</u> (Hansen) Luc. & Cast.	V
<u>Cistus osbaeckiaefolius</u> Webb ex Christ. . .	E
<u>Erigeron cabreræ</u> Dittrich.	V
<u>Gnaphalium teydeum</u> Knapp.	E
<u>Helianthemum juliae</u> Wildpret.	E
<u>Micromeria lasiophylla</u> Webb et Berth. <u>ssp.</u> <u>lasiophylla</u>	R
<u>Monanthes brachicarpa</u> (Webb et Berth.) Lowe <u>var. nivata</u> Svent.	E
<u>Monanthes niphophila</u> Svent.	E
<u>Sideritis cretica</u> L. <u>var. stricta</u> (Webb) Mend. He	nt
<u>Stemmacantha cynaroides</u> (Chr. Sm. in Buch) Dittrich.	E

ENDEMIC SPECIES OF THE CANARIAN SUPERSTRATUM
FOUND MAINLY IN THE PARK.

<u>Andryala pinnatifida</u> A. t. <u>var. teydea</u> Webb.	nt
<u>Argyranthemum adauctum</u> (Link.) Humphr. <u>ssp. dugourii</u> (Bolle) Humphr.	nt
<u>Argyranthemum teneriffae</u> Humphr.	nt
<u>Carlina xeranthemoides</u> L. fil.	R
<u>Descurainia bourgaeana</u> (Fovru.) Schulz.	nt
<u>Descurainia gozalezii</u> Svent.	V
<u>Echium auberianum</u> Webb et Berth.	E
<u>Echium wildpretii</u> Pers. ex Hook fil.	V
<u>Micromeria lachnophylla</u> Webb et Berth.	K
<u>Pimpinella cumbræ</u> Link.	nt
<u>Pterocephalus lasiospermus</u> Link. ex Buch.	nt

Virga cheirantifolia Humb. et Bonpl. ... V
Arrhenatherum calderae Hans. R

ENDEMIC CANARIAN SPECIES FOUND IN THE PARK.

Adenocarpus viscosus (Willd.) Webb et Berth. nt
Aeonium smithii (Sims.) Webb et Berth. .. V
Aeonium spathulatum (Hornem.) Praeger var. spathulatum. nt
Eustrogon origanifolius L' Hér. V
Cerastium sventenii Jales. V
Chamaecytisus proliferus (L.fil.) Link. . nt
Cheirolophus teydis (Chr. Sm. in Buch) L. López. R
Erysimum scoparium (Brouss. ex Willd.) Wettst. K
Ferula linkii Webb. nt
Lotus campylocladus Webb et Berth. R
Nepeta teydea Webb et Berth. var. teydea. R
Nepeta teydea Webb et Berth var. albiflora Svent. V
Pinus canariensis Chr. Sm. nt
Plantago webbii Barn. nt
Pollicarpea tenuis Webb ex Christ. R
Rhamnus integrifolia DC. R
Scrophularia glabrata Ait. nt
Senecio palmensis (Chr. Sm. in Buch) Link. R
Silene nocteolens Webb et Berth. R
Spartocytisus supranubius (L.fil.) Webb et Berth. nt
Tolpis webbii Sch. Bip. ex Webb et Berth. nt

UICN Category	E	V	R	K	nt	TOTAL	%	% ACUMULA
NO de species								
Endemic species of the Park.	7	2	1	-	1	11	21	21
Endemic species of the Canarian Superstratum.....	1	3	2	1	6	13	25	46
Endemic species of the Canaries(excluding the two previous categories).	-	3	7	1	9	20	38	84
TOTAL.	8	8	10	2	16	54 (45+9 no endemic)		
% of the Total.	15	15	19	4	30			

- E= endangered; V= vulnerable; R= rare; K= insufficiently known; nt= neither rare or threatened.

A P P E N D I X IIFAUNARELACION DE VERTEBRADOS EN EL PARQUE NACIONAL DEL TEIDE

	<u>Elemt. faunístico</u>	<u>Status</u>	<u>Abundancia</u>
<u>REPTILES</u>			
<u>Lacertidae</u>			
Gallotia g. galloti	E	R	A
<u>AVES</u>			
<u>Paseriformes</u>			
Lanius excubitor Koenigi	Vi	R	C
Anthus b. bertheloti	Em	R	A
Sylvia conspicillata orbitalis	Vi	R	O
Phylloscopus collybita canariensis	Vi	R	A
Parus caeruleus teneriffae	Vi	R	U
Serinus canarius canarius	Em	R	C
Turdus merula		?	O
<u>Apodiformes</u>			
Apus unicolor unicolor	Em	R?	C
<u>Fasianiformes</u>			
Alectoris barbara Koenigi	Vi	R	C
<u>Columbiformes</u>			
Columba livia canariensis	Vi	R	C
<u>Colvidos</u>			
Corvus corax tingitanus		R	C
<u>Falconidas</u>			
Falco tinnunculus canariensis	Vi	R	C
<u>MAMIFEROS</u>			
Aetechinus algirus	I	R	U
Quiroptera: Plecotus a. teneriffae		?	U
Dryctolagus cuniculus	I	R	A
Ovis ammon musinon	I	R	U
Felis domesticus	I	?	U
Rattus norvegicus	I	R	U
Rattus rattus	?	?	?
Mus musculus	I	R	U

E = Endémica; Em= Endemismo macaronésico (Canarias y Madeira); Vi= Variedad insular
R = Reproducción en el Parque; A = Abundante; C = Común; O = Ocasional.

RELACION DE ARTRÓPODOS CITADOS EN EL PARQUE NACIONAL DEL TEIDE.*

	<u>Elemento faunístico.</u>
<u>ISOPODOS</u>	
<u>Armadillidae</u>	
Venezillo tenerifensis. Dalens	Em
<u>MIRIAPODOS</u>	
<u>Quilópodos</u>	
Geophilus carpophagus. Leach	
Lithobius speleovulcanus. Serra	
<u>Litobiomorfos</u>	
Lithobius crassipes. L. Koch	
L. Teneriffae. Latzel	E
<u>Dibolopodos</u>	
Dulicnociulus vossleri. Verhoeff	
Nesopachyiulus sp.	
<u>ARACNIDOS</u>	
<u>Pseudoscorpiones</u>	
Geogripus canariensis (Tulgren. 1900)	
Chthonius sp.	
<u>Solifugos</u>	
Eusimonia wunderlichi (Pieper. 1977)	E
<u>Opiliones</u>	
Bunochalis spinifera (Lucas. 1939)	E
<u>Araneae</u>	
<u>Oecobiidae</u> Oecobius sp. n sp.	
<u>Filistalidae</u> Filistata canariensis.S.	E

* Se relacionan los principales grupos, especies y subespecies, de artrópodos citados en el Parque Nacional del Teide, hasta la actualidad.

E = Endemismo canario.

Em = Endemismo macaronésico

Et = Endémico de Tenerife.

E suprac. = Endémico restringido piso supracanario.

C = Cosmopolita.

H = Holártica.

P = Paleártica.

T = Sólo citada en Tenerife.

	<u>Elemento faunístico</u>
<u>DERMAPTEROS</u>	
Anataelia canariensis	E
Guanchia uxoris (Heller 1907)	T
<u>HEMIPTEROS</u>	
<u>Tingoidea</u>	
Dictioneta teydensis	E
<u>Fulgoroidea</u>	
Bursinia canariensis	E
Hyalesteles angustulus	E
Pionosomus alticola	E
<u>Anthocoridae</u>	
Orius retamae	E
Anthocoris alienus teydensis	E
<u>Miridae</u>	
Psallus sp.	
<u>Cicadelloidea</u>	
Erythroneura spartocytisi	E
<u>Aphidoidea</u>	
Aryrtosiphon geniste	
<u>HIMENOPTEROS</u>	
<u>Halictidae</u>	
Sphecodes marginatus	
Halictes laetus	E
<u>Andrenidae</u>	
Andrena chalcogaster	E suprac.
<u>Apidae</u>	
Apis mellifera	
<u>Megachilidae</u>	
Megachile canariensis	E suprac.
<u>Formicidae</u>	
Leptothorax g. gracilicornis (Emery 1982)	E
Lasius niger (Linne 1758)	H
Monomorium medince (Forel. 1892)	Et
Plagiolepis barbara canariensis (Santschi. 1920)	
<u>Colletidae</u>	
Colletas dimiatus	
Hylaeus ater	

Elemento faunístico

Disderidae Dysdera sp.
Pholcidae Pholcus sp.
Linyphiidae Lephyphantes sp.

Gnaphosidae

Drassodes riedeli, Schmid. 1968 E
Haplodrassus cf canariensis Schmidt.

H. signifer (c.l. Kock 1839)
Nosinia musiva (Simon, 1889) E
Setaphis canariensis (Simon, 1883) E
Zelotes teydei. (Schmidt, 1968) Et

Zodaridae

Zodarion canariensis (Wunderlich 1980) T

Theridiidae

Theridion sp.

Linyphiidae

Walcknaera (= Prosopotheca) monoceros

Ceratinella sp.. n. sp.
Lephyphantes sp.. n. sp.

Philodromidae

Thanatus sp.. n. sp.

Lycosidae

Alopecosa gracilis (Bosenberh. 1984) E

Salticidae

Aelurillus restingae Schmidt. 1977
Pellenes sp.

INSECTOS

Colembolos

Entomobrya multifasciata. Tullberg

Thysanuros

Ctenolepisma lineata, Brullé

Blatoideos

Phyllodromica bivittata, Brullé

ORTHOPTEROS

Gryllomorpha canariensis (Chopard. 1939) Et
Colliptamus plebeius, (Walker, 1870) E
Sphingonotus rubescens, (Walker, 1870)

<u>Anthophoridae</u>	<u>Elemento faunístico</u>
Anthophora alluendi	E suprac.
 <u>COLEOPTEROS</u>	
<u>Carabidae</u>	
Nasaecarabus interruptus (Dejean)	E
Calathus ascendens (Wollaston. 1862)	E
Licinopsis alternans (Dejean. 1889)	E
Platiderus languidus alticola (Wollaston. 1864)	T
Masoreus alticola (Wollaston 1864)	Et
Philorhizus atlanticus fortunatus (Mateu. 1956)	E
Dricrodontus brunneus (Dejean. 1831)	E
Eutrichopus martini. Machado	E
Wolltinerfia tenerifea. Machado	E
 <u>Staphylinidae</u>	
Omalius sculpticolle (Wollaston. 1864)	E
Philorinum floricola (Wollaston 1864)	E
Oxytelus nitidulus (Gravenhorst. 1802)	P
Hypomedon canariensis (Bernhauer. 1928)	E
Gyrohypnus fracticoumis (Muller. 1776)	P
Philonthus marcidus (Wollaston. 1864)	E
Heterothops canariensis (Israelson. 1979)	E
Apterenopsis canariensis (Oromí & Martín)	E
Domene sp.	
Mycetoporus adumbratus (Wollaston. 1865)	E
Tachyporus nitidulus (Fabricius. 1792)	P

Elemento faunístico

Oligota parva, (Kraatz. 1862)	
Geastiba teydensis, (Palm. 1975)	Et
Atheta coriaria, (Krauss. 1856)	P
Atheta pertyi, (Heer. 1838)	
A. nigra, (Krauss 1856)	
A. triangularis	
Aleochara bipustulata, (Linneo 1761)	P
<u>Buprestidae</u>	
Acmaeodera cisticisti, (Wollaston. 1862)	E
<u>Elateridae</u>	
Cardiophorus globulicollis, (Wollaston. 1862)	E
<u>Ptinidae</u>	
Casapus alticola, (Wollaston 1862)	E
<u>Melyridae</u>	
Attalus aenescens, (Wollaston 1862)	E
Haphocnemus sculpturatus (Wollaston 1862)	E
Malirosoma hirtum (Wollaston 1862)	E
<u>Nitidulidae</u>	
Cybocaphalus canariensis (Endrodi - Younga. 1968)	E
<u>Cucifidae</u>	
Monotoma bicolor (Villa 1835)	E
M. lingicollis, (Gyllenhal 1827)	E
Airaphilus n. nubigena (Wollaston. 1863)	E
Laemophloeus granulatus, (Wollaston. 1854)	E
<u>Cryptophagidae</u>	
Cryptophagus dentatus, (Herbst. 1793)	E
C. versicolor, (Har. Lindberg. 1950)	E
Atomaria fasciata pilosula, (Wollaston)	Et?

	<u>Elemento faunístico</u>
<u>Coccinellidae</u>	
Scymmus cercyonides, (Wollas- ton)	E
S. rufipennis, (Wollaston)	E
<u>Lathrididae</u>	
Metopthalmus asperatus, (Wollas- ton)	
Corticaria alticola	Et (Exclusiva Teide-Cañadas)
<u>Tenebrionidae</u>	
Hegeter ternuipunctatus. (Brullé)	Et (Exclusivo piso supracanario)
H. lateralis, (Brullé)	Et (Ex. Asociado viola)
Pimelia radula ascendens (Wollas- ton)	Et (Ex. supracana- nario)
P.r. radula	
P.r. granulata	
Crypticus navicularis canariensis, (Wollaston)	E sspT
Nesotes altivagans, (Wollaston)	Et (Ex. supracana- nario)
<u>Scraptiidae</u>	
Anapis proteus, (Wollaston)	
<u>Dedemeridae</u>	
Haloxantha concolor. (Brullé)	E
<u>Anthicidae</u>	
Anthicus sp. 1. (Daykull)	
Anthicus cf. canariensis, (Israelon)	E
<u>Chrisomelidae</u>	
Longitarsus echroleucus, (Marsham)	
<u>Bruchidae</u>	
Bruchidius Wollastoni, (Decelle)	E (supracanario)
<u>Curculionidae</u>	
Laparoceros crassifrons, (Wollaston)	E (supracanario)

	<u>Elemento faunístico</u>
L. scapularis (Wollaston)	E supracanario
L. tessellatus (Brullé)	E
L. canariensis (Boh.)	E
Echinodera crengta (Wollaston)	E supracanario
<u>Scolytidae</u>	
Liparthrum migrescens (Wollaston)	E
<u>LEPIDOPTEROS</u>	
<u>Aegeriidae</u>	
Dipsosphecia vulcania. (Pinker)	E
<u>Pieridae</u>	
Pieris rapae. L.	C
Pontia daplidice. L.	H
Colias crocera	H
Euchloe belemia. Esper.	
ssp eversi. St.	E
<u>Nymphalidae</u>	
Vanessa atalanta. L.	H
Vanessa vulcania. Godart	Em
<u>Satyridae</u>	
Pararge xiphioides	E
Pseudotergumia wysii. Chr.	E
<u>Lycaenidae</u>	
Lycaena phlaeas. L.	H
Cyclyrus webbiana (Brullé)	E
<u>Noctuidae</u>	
Euxoa beatissima	
Noctua noacki	
<u>Lymantriidae</u>	
Macaronesia fortunata. Psfr.	E
<u>Microlepidopteros</u>	
Gnophos canariensis teidensis	E supracanario
Caradrina clavipalpis teidevolana	E supracanario
Nothris congrasserella	E
Phyllonorycter foliolosi	E
Orneodes n sp.	E

DIPTEROS

Elemento faunístico

Wholfahrtia bella	E exclusiva
Machimus mixtus	E exclusiva
<u>Chloropidae</u>	
Thaumatomyia sulcifrons	P
<u>Therevidae</u>	
Thereva teydea	E
<u>Asilidae</u>	
Promachus vexator	E

A P P E N D I X V

- I. Law 5/1981 of 25 March, reclassification of the Teide National Park.
- II. Law 15/1975 of 2 March, protected natural areas.
- III. Royal Decree 2423/1984 of 14 November, which approved the management plan of Teide National Park.
- IV. Royal Decree 2676/1977 of 4 March, by which the bylaw was approved for the enforcement of the Law 15/1975 of 2 May for protected natural areas.
- V. Decree of 22 January 1954, through which Teide National Park is created.
- VI. Order of 29 November 1955, through which the bylaw is approved under which Teide National Park is to be governed.
- VII. Agreement of 19 December 1986 of the Patronato of the Teide National Park which approved the visitors plan of the park.

Law 5/1981 of 25 March, reclassification of Teide National Park (Tenerife)

First article - objective

1. The objective of this law is to establish a special legal regime for Teide National Park (Tenerife) and its reclassification as such, in accordance with that which is stated in the Law fifteen/nineteen hundred and seventy-five of the second of May, for protected natural areas.
2. This special legal regime has as its objective to protect the integrity of the geosystems, fauna, flora, vegetation, water and atmosphere, as well as the archeological value, and in short the whole of the ecosystems in the national park, because of its educational, scientific, cultural, recreative, tourist and socio-economic interest.

Third article - protection

1. All activities which could possibly alter the elements and dynamics of the ecosystems in the national park are forbidden.
2. Each and every one of the traditional activities, that is activities which involve agriculture or water, the exploitation of wild rabbit hunting, activities which involve reclamation, and how the existing installations should be used, will be regulated by the directive for the use and management.
3. The land that comprises the national park has been classified to all purposes as land that cannot be used for any kind of urban development, as the objective of special attention.

Fourth article - peripheral areas of protection (buffer zone)

1. The boundaries of an outer continuous peripheral area of protection have been marked in order to guarantee the complete protection of the natural resources that have justified the creation of the park and to avoid possible ecological impacts or impacts on the landscape that could come from the outside. Its geographical boundaries are those which have been established in Annex II of this law.

Fifth article - directive for the use and management (management plan)

1. In the space of one year's time maximum, as of the enactment of this law, the Minister of Agriculture, through the National Institute for the Conservation of Nature, will design the directive for the use and management of Teide National Park; this directive will be made public and will also be submitted to the Board for prior provisional approval, and then to the government for final approval.

2. This directive, which will be valid for four years, and which will have to be reviewed at the end of this period of time or before, if necessary, will include:

- a. the general guidelines as to the planning and use of the national park;
- b. the norms of management and proceedings which are necessary to conserve and protect its natural merits, and to guarantee the fulfilment of the objectives;
- c. the creation of certain zones which show the boundary lines between areas with different uses and destinations.