

Valsaín

Sustainable management
in practice



GOBIERNO
DE ESPAÑA

MINISTERIO
DE MEDIO AMBIENTE
Y MEDIO RURAL Y MARINO



MINISTERIO
DE MEDIO AMBIENTE
Y MEDIO RURAL Y MARINO

SECRETARÍA DE ESTADO
DE MEDIO AMBIENTE Y AGUA,
SUELO Y ZONAS COSTERAS

CONSEJO DE INICIATIVAS Y
SOSTENIBILIDAD DE VALSAIN



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SUSTAINABLE MANAGEMENT IN PRACTICE



At the centre of the Iberian peninsula, on the northern slopes of the Sierra de Guadarrama are the Valsain Forests, within the municipal district of San Ildefonso-La Granja, in the province of Segovia. An area of outstanding natural beauty, of environmental, historical and cultural importance, and an example of how traditional management of natural resources can be combined with exploitation and conservation.

And within a particularly significant part of the forest is the CENEAM (Centro Nacional de Educación Ambiental), the National Centre for Environmental Education, whose main aim is to encourage the general public to share their responsibility for the environment.



Both of these administrative units - the Valsain Forest and Sawmill Centre and the CENEAM - belong to the National Parks Body (AOPN) (Spanish Ministry for the Environment and for Rural and Marine Affairs).

The Valsain complex as a whole, made up of the Matas and Pinar forests, the Sawmill and the CENEAM, demonstrates how it is possible to apply sustainability methods that reconcile the production of raw materials and utilisation of natural resources with their conservation. Also how it is possible to generate wealth and employment, allow public visits and offer programmes and services that provide information, create awareness, educate and encourage participation in environmental matters in general.

Valsáin forests and sawmill

The Valsáin Forests are located on the northern slopes of the Sierra de Guadarrama within the municipal district of San Ildefonso-La Granja. They cover an area of 10,668 hectares (26,361 acres), and include the Montes and Pinar de Valsáin forests (numbers 1 and 2 in the Public Utility Catalogue of the province of Segovia). Valsáin was the first natural area to receive legal protection in Spain with the prohibition of hunting and fishing in 1579. Previously the forests belonged to the city of Segovia, its Junta de Linajes and the commons, until they were bought up in 1761 by King Charles III. The property has been linked with the Monarchy ever since, except for the period between the Act for the disentailment and sale of Crown property of 9 December 1869 and the Act of June 1876 when the Matas forest entered private hands. It was subsequently returned to the Crown with the exception of Matas Pirón, Mata de la Saúca and Navalosar. During the Second Republic, it became part of the National Heritage.



In 1982 and as a result of Act 23 of 16 June on the National Heritage, ownership of these forests was transferred to the ICONA and subsequently, when this body was dissolved, to the National Parks Body which manages them through the Valsáin Forests and Sawmill Centre. The environmental importance of the forests led to their being declared a Special Protection Area (SPA) in 1988 and proposed in 1998 as a Site of Community Importance (SCI). Their status as SPA, by virtue of Council Directive 79/409/EEC of 2 April 1979 on the conservation of wild birds (amended by Directive 2009/147/EC of 30 November 2009) and as SCI by virtue of Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora, means that they will become a Special Conservation Area (SCA) within the NATURA 2000 Network. The latter aims to help guarantee biodiversity by conserving natural habitats and wild flora and fauna in European territory. Previously, in 1930, 587 hectares (1,450 acres) of the Pinar del Río Acebeda were declared a Site of National Interest.





Approval was recently given by the Government of Castile-León to the Plan for the Regulation of Natural Resources of the Sierra de Guadarrama. This document lays down regulations and guidelines for conservation and management and is a preliminary requisite for declaration of the Sierra de Guadarrama Nature Park and of a possible National Park. The Valsain Forests fall within the scope of this document.



General information

- Total area: 10,668 ha (26,361 acres) - 7,622 ha (18,834 acres) for the Pinar Forest and 3,046 ha (7,527 acres) for the Matas Forest.
- Municipal district: San Ildefonso-La Granja (Segovia).
- Additional protection designations:
 - :: Special Protection Area (SPA) for birds
 - :: Plan for the Regulation of Natural Resources of the Sierra de Guadarrama
 - :: Natural Site of National Interest for Pinar de la Acebeda, located on 587 ha of the Valsain pine forest (declared in 1930).
 - :: SG -3 Critical Area for the purpose of the Spanish Imperial Eagle Recovery Plan in Castile-León.



Flora and vegetation

The Matas and Pinar de Valsaín Forests have been studied for centuries because of their natural and historic importance, the richness of their flora and their proximity to two important towns - Segovia and Madrid.

The full catalogue of the vascular flora of the Matas and Pinar de Valsaín Forests comprises 867 taxons. In addition to these, there are 69 alochthonous species, most of which are linked to built areas, close to houses and gardens, car parks, etc.

The varied landscape of the Matas and Pinar de Valsaín Forests creates a wide variety of environments and consequently a great diversity of flora and fauna.

The mountain areas are very varied, with high mountains reaching altitudes of over 2,000 metres (6,561 ft) that drop in just a few kilometres to valley floors at just above 1,000 metres (3,280 ft). Rainfall varies from 1,500 mm in uplands to about 900 mm further down. Some of the slopes face south, others north, and the characteristics of the soil, which tends to be less developed at higher altitudes and deeper in the valleys create a variety of habitats for species having very different requirements.

The forests include a wide diversity of natural habitats ranging from Pyrenean oak woods in the valleys to mountain meadows on the peaks, with pine forests, the most predominant habitat, as well as rocky and stony ground, bogs, river banks, rivers and streams, holly woodlands, etc.

This diversity makes it possible for both mountain and Mediterranean species to co-exist in a single valley. And the fauna is able to move to different altitudes as required at different times of year. The main plant formations in the Matas and Pinar de Valsaín forests are:

Pinus sylvestris forests:

This is the most widely-extended plant formation in the forests, stretching from an altitude of 1,200 m to above 1,900, the maximum height for forests in this area. Below 1,400 m, there is often an understory of Pyrenean oak (*Quercus pyrenaica*). Scots pine (*Pinus sylvestris*) grows to an average of 25 m (82 ft) though, in some good locations, exceeds 30 m (98 ft) On the bank of the Acebeda river, there is one specimen growing to over 40 m (131 ft). The understory mostly comprises broom (*genista florida*) and juniper (*juniperus communis*), hardy broom (*Cytisus balansae* or *Cytisus purgans*), brambles (*Rosa* sp. and *Rubus* sp.) in clearings in the middle of the





pine forests. Higher up, the understory is dwarf juniper, broom, Guadarrama broom (*Adenocarpus hispanicus*) and blueberry (*Vaccinium myrtillus*) and, on lower ground, in addition to broom (*Genista florida*, *Cytisus scoparius*), there is honeysuckle (*Lonicera periclymenum*, *L. xylosteum*), rowan (*Sorbus aucuparia*), common hawthorn (*Crataegus monogyna*), blackthorn (*Prunus spinosa*), heather (*Erica arborea*), hazel (*Corylus avellana*), wild cherry (*Prunus avium*) and European holly (*Ilex aquifolium*), the latter especially in shady, damp areas. Holly is much less frequent in the Matas forest than in the Pinar forest.

Quercus pirenaica forests:

Pyrenean oak woods occupy the lower slopes between 1,000 and 1,400 m. At these altitudes there may be both early and late snowfalls, when the leaves are still green so the snow is more likely to remain on the branches often breaking them, especially in young trees. This species most usually grows in coppices in both forests. The ground vegetation under the oaks is mostly cistus (*Cistus laurifolius*), sloe, blackthorn (*Rhamnus catártica*), privet (*Ligustrum vulgare*), honeysuckle, broom, common hawthorn, rose, *Adenocarpus complicatus*. There are practically no oaks in the Pinar forest.



Quercus ilex forests:

These occupy two small areas in the forests, one from 1,300 to 1,350 m on the slopes of the Cabeza Grande mountain and the other on the northern side of the Cerro Matabueyes between 1,180 and 1,225 m. The understory is made up of typical species such as *Cistus laurifolius*, *Halimium umbellatum*, *Thymus mastichina*, *Thymus vulgaris*, *Santolina rosmarinifolia*, *Lavandula stoechas* ssp. *pedunculata* and *Helycrysiumstoechas*.

Other plant formations to be found in the forests include grasslands of different types including *nardus stricta*, valley meadows, broom, creeping juniper, heather and broom.



Piornales, Enebrales rastreros, Brezales, Cambroñales.

In some places there are pure or almost pure hazel woods, holly woods - always beneath pines, riparian woods with willows (*Salix* sp.), common buckthorn (*Rhamnus cathartica*), alder buckthorn (*Frangula alnus*), hawthorn (*Crataegus monogyna*), and narrow-leafed ash (*Fraxinus angustifolia*). There are also some pine forests with an understory of wild cherry (*Prunus avium*) and occasional aspen (*Populus tremula*) woods.



Fauna

According to the Catalogue of fauna of the Valsain Forests included in the 6th Review of the Regulations for the Pinar Forest, the most complete to date, the total number of species in the different groups of fauna (excluding insects) is:

- Mammals 45
- Birds 150
- Reptiles 15
- Amphibians 10
- Fish 5

One of the greatest values of these forests is their bird life, with over 100 species of nesting birds. Of special importance is the Iberian Imperial Eagle (*Aquila adalberti*) of which there are three pairs, the Black Vulture (*Aegypus monachus*) with a large colony, Griffon Vulture (*Gyps fulvus*), various species of eagle, woodpeckers (*Dendrocopos major* and *D. minor*) and the red-billed chough (*Pyrrhocorax pyrrhocorax*).





The mammals include the common otter (*Lutra lutra*), roe-deer (*Capreolus capreolus*), wild boar (*Sus scrofa*) and various species of bat. The *Myotis blythi nathalinae*, *Sorex araneus granarius*, *Talpa caeca occidentalis* and *Pitynus lusitanicus depressus* are endemic. The fish include trout (*Salmo trutta*) and the amphibians and reptiles include the Iberian Emerald Lizard (*Lacerta schreiberi*), Iberian Rock Lizard (*Lacerta monticola*), Snub-nosed Viper (*Vipera latastei*), Fire Salamander (*Salamandra salamandra bejarae*) and Iberian Frog (*Rana iberica*).

54 endemic species of invertebrate live in these forests. There is a very large number of insect species, including the following butterflies - *Graellsia isabelae*, *Parnassius apollo*, *Nymphalis antiopa* and *Apatura iris*.



Public use

There are three recreational areas in the Valsáin Forests containing most of the facilities available for use by the public. Located on the CL-601 road, they are Boca de Asno, Los Asientos and El Robledo. The former includes the Boca del Asno Interpretation and Information Centre where, in addition to information on the forests and how to enjoy them, there is also an exhibition on the natural resources of the forests and how these are managed. This centre, as well as Los Cogorros (at the Navacerrada Mountain Pass) and Los Asientos, are the starting-points for free guided walks in the summer months.



Management

The aim of the National Parks Body in Valsáin is to reconcile forestry management with cattle grazing, conservation of the flora, fauna and landscape with public utilisation, while also promoting the forests' historical legacy. These aims are laid down in the following documents which are all reviewed periodically:

- 6th Review of the Regulations for the Pinar de Valsáin Forest (2000-2009)
- 2nd Review of the Regulations for the Matas de Valsáin Forest (2004-2019)
- 1st Review of the Forestry and Farming Regulation for the Valsáin Forests (2000-2009)
- 4th Plan for the Valsáin Forests Hunting Estate (hunting seasons 2006-7 to 2009-10)





Sustainable Forestry Management System in the Valsain Forests

The documents on the 7th Review of the Regulations for the Pinar de Valsain Forest and the 2nd Review of the Forestry and Farming Regulations for the Matas and Pinar de Valsain Forests are in the process of completion. A LIDAR flight using a laser sensor was used for drawing up the inventory, this being one of the most modern techniques for forestry inventories. The preliminary data indicate that the forests have increased in surface area and in volume of stocks, confirming the impression that the vegetation is developing positively. Different specialist groups participated in the drafting of this document.

The Forests are divided for forestry management and sustainable exploitation of their resources into 25 working circles for different purposes (mostly, production) in which different restrictions or modifications apply. In one of these circles, timber is not felled, the aim being to establish an area of mature semi-natural pine forest. The forests' timber stocks and potential are as follows:

<i>m³</i>	<i>Matas forests</i>	<i>Pinar forests</i>
Scots Pine stocks	284.216,00	2.337.974,00
Black Pine stocks	2.393,00	-
Oak stocks	56.720,00	2.073,00
Holm oak stocks	3.822,00	-
Scots pine potential	3.626,25	28.748,50
Oak potential	250,00	-

In the Pinar Forest, the main species is the Scots Pine (except for 50 hectares) which, in the Matas Forest, shares the lead with the Pyrenean oak.

The oak coppice forest is thinned by cutting no more than 15% of the basal area and removing any dry or dead trunks.

In the Pinar Forest, the felling method is group shelterwood cutting, which opens small spaces in the stand to allow light in to help the fallen seeds take root and let the new generations grow.

Spaces are then opened up around the regenerated trees so that, over certain periods of time, mature trees can be replaced with densities of almost 250 stocks per hectare. This density then gradually decreases because of natural deaths, thinning and shelterwood cutting.

This type of felling must be carried out with care and only at certain times and in certain areas for landscape reasons and to not affect other habitats or the reproduction of vulnerable species. There are certain areas of the forests where logging is not carried out, including a radius of 100 metres around Black Vulture and Imperial Eagle nests. A restriction also applies only during the felling period to a radius of 500 metres around such nests, and an on-going inventory is constantly being drawn up of such places.

Once the timber has been felled, it is lopped and cross-cut so that it can then be hauled using horses, tractors and self-loaders. The age of maturity for pine is 120 years.

In most of the working circles in the Forests the method used is the floating periodic block.

This classifies the different stands in the working circle (areas delimited by natural contours, paths, etc. in which it is possible to establish an inventory of the number of trees, their volume, age, etc.) by maturity of the trees, creating three groups:

- Regeneration Group: stands in which, during the review period, regeneration should be begun, continued or completed, with certain limits regarding the surface area involved.
- Improvement Group: stands in which regeneration has been achieved.
- Preparation Group: stands with full density and almost mature trees which may be included in the Improvement Group when the next review is carried out. Thinning focuses on Regeneration Groups. In Improvement Groups the mature trees which had been left to provide seeds are felled and trees are felled. In the Preparation Group, dry and diseased trees are felled and liberation felling is carried out to achieve optimum densities to ensure the start of regeneration when the tract enters the next group.

In an area covering 50 hectares of the Revenga working circle, it was decided during the latest review of the Pinar Forest Regulations that there should be two main species - pine and holly - and that coppicing with standards should be carried out in the holly growth with the aim of achieving, in the long term, the preponderance of an adult mass of holly.

This type of management has allowed National Parks to obtain, after the necessary inspections, the FSC and PFC certificates for sustainable forestry management (SW-FM/COC-001441 valid since 24/02/2005, and PEFC/14-23-00008 valid since 12/11/2004) including, in the former, the chain-of-custody for timber processed in the Valsaín sawmill.

For the management and conservation of the Valsaín Forests, National Parks has a staff of 53 including field workers, sawmill and administrative staff, forest rangers, environment agents and four qualified specialists. It also receives invaluable assistance from public and private enterprises taken on for different technical matters.





Valsain Sawmill

This is located in the Matas Forest and processes the timber that is felled from the Valsain Forests, in line with the planning documents.

The Valsain Sawmill was set up in 1884, under the sponsorship of the Royal Household, using steam-driven machinery. The Royal Mechanical Sawmill, rehabilitated in 2008-2009, is soon to house the Timber Museum, displaying the original wooden structure and the steam equipment that used to drive the sawmills.

In 1952, the National Heritage built what at the time was a modern factory with a head saw, a resaw mill, a band mill and a pendulum saw but this had become clearly outdated when the Sawmill was transferred to the ICONA. The penultimate modernisation was begun in 1985 by forestry engineer Fernando Espiga Valenciaga, who installed modern production equipment.

On 1 October 2005, a fire destroyed the machinery and part of the building housing it. It was then decided that the whole plant should be remodelled. Two of the three stages of restoration have been completed and commissioning of the complete mill is currently under way.

The new plant is fitted with cutting-edge equipment - a rounding machine, barking drum, metal detector, slabber, a sloping saw carriage, multiple edger, stacking machine and chipping system.

A boiler fuelled by sawmill waste will provide heating for the complex and there will also be a small machine producing briquettes. The products are classified under different qualities within the Sawmill. "Maderas de Valsain" is a registered brand and the production process has been designed to meet new market requirements.







CENEAM - National Centre for Environmental Education

Since 1987 when the CENEAM was opened, it has seen Environmental Education as a tool for passing on new ethical models and attitudes regarding the environment. It continues to pursue the goal of creating awareness amongst all citizens on the need for active participation, both individually and in groups, in the search for solutions to the environmental crisis that may have serious effects for our future.

The CENEAM reports to the Spanish Ministry for the Environment, and Rural and Marine Affairs (MARM), as well as the National Parks Body to which it is directly responsible. Its functions are:

- a) Planning and follow-up of environmental education programmes.*
- b) The adoption of commitments in this area laid down in national and international documents.*
- c) Actions to provide information, create awareness, offer training and encourage public participation in environmental matters.*



Since the start, this Centre has focused on a wide range of services and programmes in the field of environmental education and on the design and production of educational and information materials and resources to facilitate the activity of professionals, students and other persons interested in this field.

The CENEAM is a Resource Centre that is at the service of and supports any public or private groups carrying out Environmental Education programmes or activities.

Programmes and materials for the purpose of creating awareness, providing information and assisting in the interpretation of the environment:

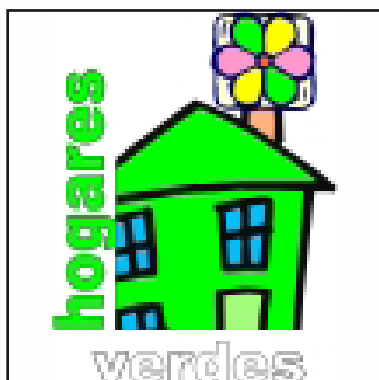
“CENEAM with Schools” Programme

The “CENEAM with Schools” Programme addresses both State and private schools at primary and secondary levels, as well as other training establishments and crafts school workshops.



Green Homes Programme

“Green Homes” is an educational programme addressing families that are concerned about the environmental impact of their decisions and daily habits. This initiative aims to help them change towards more responsible management of their homes.



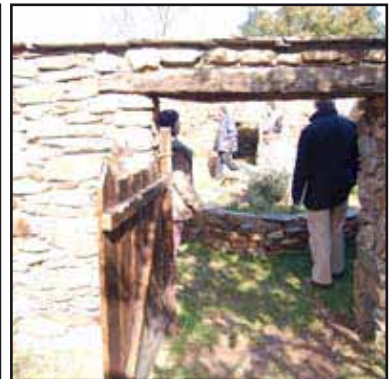
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SUSTAINABLE MANAGEMENT IN PRACTICE



Programme for the Recovery and Educational Utilisation of Abandoned Villages

The Programme for the Recovery and Educational Utilisation of Abandoned Villages is an educational programme that complements teaching in schools. It is promoted by the Ministries for the Environment and Rural and Marine Affairs, Education and Science and Housing, and receives collaboration from the Education Councils of the Autonomous Regions of Castile-La Mancha, Extremadura and Aragon. The aim is to allow young people from urban areas to gain insight into rural life, helping them understand the need for changing attitudes in order to achieve future balance between people and their environment.



Programme of excursions and educational walks around the Valsain area.

Visitors are invited to discover the nature, history and traditions of the Valsain and Sierra de Guadarrama landscapes, the aim being that respect and knowledge should contribute to conservation of their special qualities.

“Under the open sky”. Open air activities and guided walks from the CENEAM.

“Under the open sky” is a programme of open-air activities and guided walks at weekends and on public holidays for the general public. Participants learn about the nature and history of the Valsain area. The programme comprises eight activities which are repeated at least once a month so that as many people as possible can participate.



Temporary Exhibitions.

This CENEAM Programme offers visitors the possibility of seeing a variety of exhibitions every year on a wide range of environmental subjects, with educational resources and different display techniques.



Travelling Exhibitions.

This Programme offers free loans of exhibitions on different environmental topics. These are designed and produced by the CENEAM or, in some cases, assigned to it by other entities.



Publications.

The CENEAM collaborates in the publication of the “Environmental Education Series” produced by the Ministry for the Environment and Rural and Marine Affairs, through the Publications Department of the National Parks Body. The following titles were brought out during 2009:





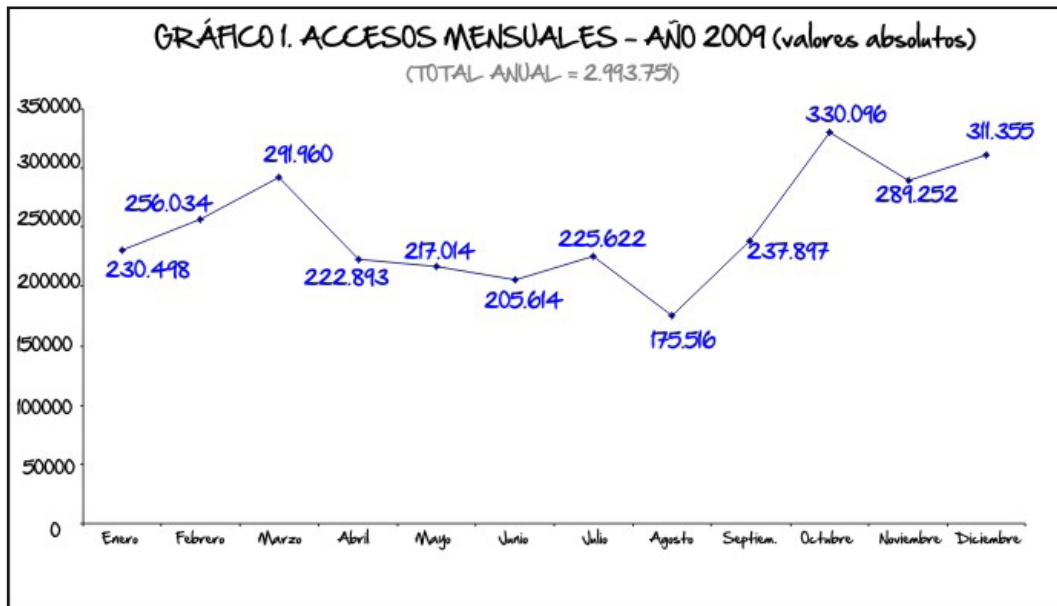
- *Attitudes and perception of the environment amongst Spanish young people.*
- *Move over, please! Bringing children back into cities.*
- *Communicating Climate Change. The Social Scenario and actions to be taken.*
- *Eleven stories about environmental participation*

Specialised information and documentation services for environmental information, communication and education.

Information service.

The CENEAM provides specialist information on environmental education and the environment as well as useful tools for environmental education programmes. Over recent years, a range of products and services have been on offer to the widest possible number of users. With the expansion of Internet use, we have now focused our efforts on maintaining the website which has been in operation since 1996. Year after year, it has received increasing numbers of visitors and has offered an increasing amount of information.

http://www.mma.es/portal/secciones/formacion_educacion/ceneam01/



The CENEAM Information Folder is a monthly electronic bulletin specialising in environmental education and information. It can be consulted free of charge on the web site and downloaded in PDF format.

http://www.mma.es/portal/secciones/formacion_educacion/boletin_ceneam/

To complement the website, an Electronic Bulletin is produced, giving links to any information that has been recently inserted. This is sent out by e-mail, free of charge, to anyone interested.

Documentation Centre, Library, Newspaper and Periodicals Library .

The CENEAM Documentation Centre includes a library, newspaper and periodicals library and video library specialising in educational education. It also has a collection of photographs, sound recordings and video images on natural areas and the environment.

- Library. This can be consulted at:

<http://www.mapa.es/biblioteca/abwebp.exe/L1/T51/G0>

- Newspaper and periodicals library. The CENEAM also has a digital photograph collection with over 15,000 photos on Spanish ecosystems, flora, fauna, protected natural areas, etc. It can be consulted at:

<http://www.mma.es/dinamicas/fototecaceneam/>

Type of documents	Ref.no. 2009	Total no. of refernces
Monographs, grey literature and journal articles	865	23.666
Periodicals	8	405
Videos		1.691
Electronic resources	140	962
Digital video maps	1.327	2.691
Map catalogues	1.718	28.393



Organisation and support for meetings, seminars and other fora for reflection, debate and coordination on environmental education.

Working groups and Permanent Seminars.

The CENEAM promotes a programme of permanent seminars which take the form of working groups, with the initial aim being to establish on-going debate fora amongst professionals in the environment sector and in environmental education. Subsequently, other sectors joined this framework for sharing ideas and experiences, for discussing effective working methods and for defining common frameworks for action. Thirteen Permanent Seminars have so far been set up:



- Environmental Education Associations
- Centres for Environmental Documentation and Protected Natural Areas
- Environmental Education Reference Centres
- Environmental Education and Sustainability in South Segovia
- Education and Communication for the Conservation of Biodiversity
- Environmental Education Enterprises
- Environmental Education Facilities
- Environmental Inspections
- Interpretation of the Natural and Cultural Heritage
- Participation and Environmental Education
- Network of Environmental Lawyers
- Responses to Climate Change through Education and Communication
- Volunteers for the Conservation of Biodiversity

http://www.mma.es/portal/secciones/formacion_educacion/grupos_ceneam/



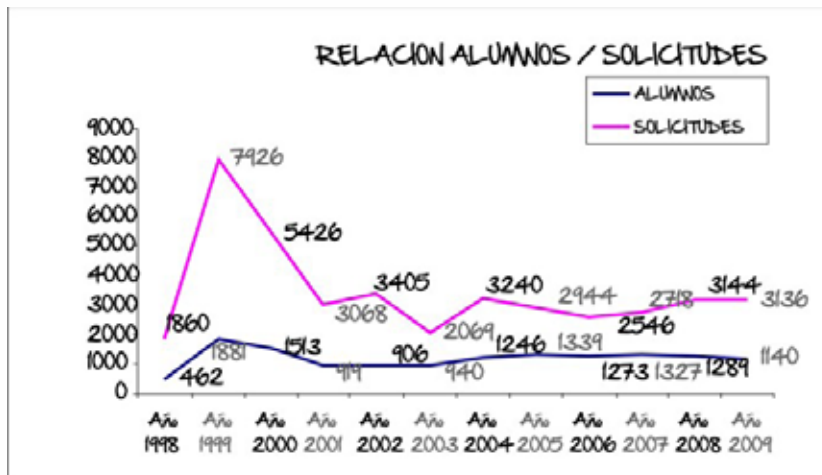
Actions in the field of environmental training for different sectors of the population

The functions of the CENEAM include actions in the field of environmental training for different sectors of the population, in some cases in collaboration with other bodies, both public and private.

The CENEAM has facilities for courses, conferences, seminars and meetings on the multiple aspects involved in environmental matters.

Since it was set up in 1987, the CENEAM has become consolidated as a specialist training centre in environmental matters and for environmental education, and enjoys prestige as such on both a national and international scale.

The Environmental Training Programme carried out by the CENEAM, part of the National Parks Body, which reports to the Ministry for the Environment and Rural and Marine Affairs, aims to meet the needs for specialist training for individuals and groups so that they can include environmental aspects in their different fields of activity. The sub-programmes are as follows:



Summer School

This sub-programme, which started out in 1993, provides training mainly for those involved in environmental education, conservation and sustainable development.

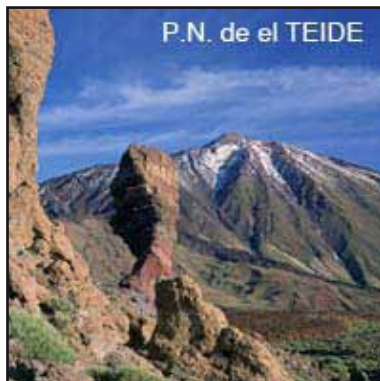
Open School

In operation since 2002, these courses aim to meet specific needs for environmental training for the members of local administrations and other administrative bodies, the unemployed and new sectors of employment in the environmental field or for professional environmental education and environment groups.

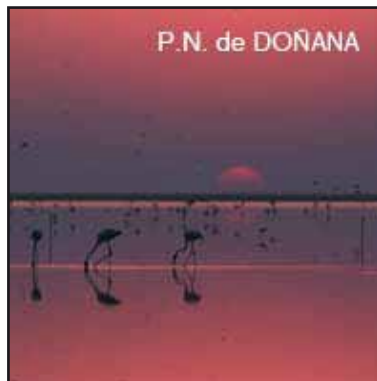
Course on National Parks

This sub-programme arose to meet the need in and for National Parks and addresses people directly involved in the socio-economic aspects of National Parks, covering matters having a direct impact on the management of such parks.

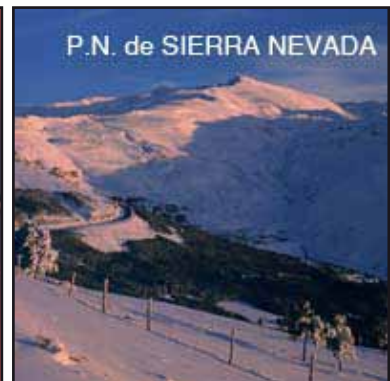




P.N. de el TEIDE



P.N. de DOÑANA



P.N. de SIERRA NEVADA

Inter-institutional Courses

These courses form part of specific agreements between the Ministry for the Environment and Rural and Marine Affairs or the National Parks Body and different professional groups in the environmental field or university students in different disciplines who are specialising in or carrying out research in the area of environmental education (Civil Guard, SEPRONA and the Inter-University Doctorate in environmental education, involving 9 Spanish universities).



On-line Courses

In order to meet the great demand for distance education and in view of the usefulness of such teaching methods, the CENEAM provides a number of on-line training courses:

- “Basic course on environmental education”
- “Local Agenda 21: a tool for achieving Sustainable Development”
- “Public participation in environmental management”
- “Techniques for determining the causes of forest fires”

The following courses are currently at the planning stage:

- “Impacts, vulnerability and adaptation to Climate Change”
- “Teaching water management”

Cooperation with public and private, national and international entities to promote environmental education.

Climate Change - Communication, education and participation.

The CENEAM collaborates with the Spanish Office for Climate Change on implementation of Article 6 of the United Nations Framework Convention on Climate Change, focusing on matters relating to access to information, awareness, education and public participation. It has drawn up a large volume of materials and information on this subject.

“From my school for my city” .

“From my school for my city” is an environmental education programme for children and young people in the city of Segovia. It was drawn up by the Council of Segovia in collaboration with the Government of Castile-León, the CENEAM and the Segovia Teacher Training School.

Collaboration with the “OXÍGENO” Project

For the last two years, the CENEAM has been collaborating in this initiative which aims to assist people find a place in society by focusing on the values of nature. The main objective is to provide training for prison inmates in the form of courses on environmental topics that have been designed especially to help them subsequently find jobs.

Water and environmental education. Young People’s Forum: Enjoying Rivers.

The CENEAM has been collaborating with the Fundación Nueva Cultura del Agua on the creation of an educational project entitled “Young People’s Forum: Enjoying Rivers”. The aim is to encourage appreciation of rivers by young people, helping to generate a water culture in line with the new guidelines of the European Framework Directive. The project addresses secondary and tertiary students and teachers from schools in the Ebro river basin.

Communication on Natura 2000.

Adoption by Spain of the Natura 2000 Network requires great efforts in the field of communication and public involvement. The CENEAM has worked on a number of projects to provide practical tools and technical criteria for the managers and educators at N2000 sites to assist them in communication and in promoting public participation. This is done in collaboration with the General Department for Wild Life of the Spanish Ministry for the Environment and Rural and Marine Affairs, and the Spanish Section of the European Federation of Nature and National Parks (Europarc - Spain).

During 2009, collaboration took place as part of the project entitled “Preparation of a strategy for communicating Natura 2000 on a local level in Poland”.



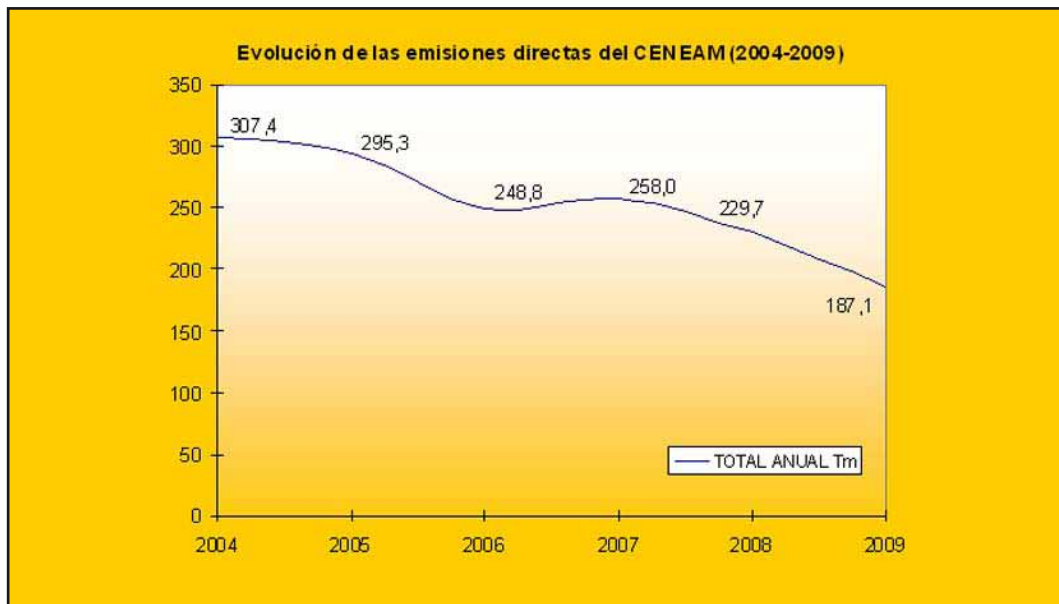


Management Initiatives.

The CENEAM is aware that its own facilities and activities have a certain environmental impact so, for a number of years, it has been working on minimising it. The aim is to ensure that its own functioning is in line with the environmental messages and criteria it is transmitting. A number of initiatives have been adopted:

CENEAM eco-audit

In 1998, the CENEAM started carrying out an environmental eco-audit based on participation by workers and visitors, with the aim of determining the principles of the Centre's environmental policy and establishing a model for education and participation that can then be adopted in other teaching establishments.



Adoption by the CENEAM of the Integrated System for Quality Management, the Environment, Health and Safety

Following the current trend in the Spanish Public Administration, the CENEAM has decided to adopt an Integrated System for Quality Management, the Environment, Health and Safety covering systems for both environmental management and workers' health and safety, while also guaranteeing a quality service for users.

In 2008 certificates were awarded to the CENEAM for four management systems. Several years of work resulted in the following certificates: ISO 9001 (Quality Management), ISO 14001 and EMAS (Environmental Management) and OHSAS 18001 (Prevention of accidents at work). Integrated management of these has now also been accredited.

In this way, the CENEAM demonstrates its firm commitment to the environment and on-going improvement in all the processes involved in its activity as well as the essential matter of the health and safety of its workers and, of course, its visitors.



Installation of a biomass heating system

The internal eco-audit which the CENEAM has been carrying out for a number of years has led to several small actions involving savings and more rational use of resources, thus improving the centre's environmental management.

Moreover, to achieve greater energy efficiency, a more ambitious project has been adopted, involving the replacement of the centre's heating and hot water system - which previously used oil and electricity - with a new biomass system. This change has led not only to an environmental improvement but aims to set an example and demonstrate the nature of the CENEAM and how it has adopted good practices.





Rehabilitation of buildings based on bioclimatic construction criteria.

The CENEAM was built in the mid-1980s since when its work and its objectives have changed. Therefore, as part of the policy for reusing the existing facilities, an ambitious project was undertaken to provide the CENEAM with a new working area based on sustainable construction criteria.

In 2007, the education-cooperation department moved its premises to the newly-refurbished space under the roofs. This alteration was done in line with the principles of bioclimatic architecture to achieve the ecological and economic savings laid down in the Integrated Management System.



Adaptation of the Centre for events in the context of the Spanish Presidency of the European Union (first half of 2010).

During 2009, a number of building alterations were carried out to prepare the CENEAM for events taking place during the Spanish Presidency of the European Union in the first half of 2010.

After 20 years providing services for the CENEAM users and visitors, the exhibition spaces on the Sierra de Guadarrama and Development of the Landscape have been converted into training and meeting rooms. Also, the assembly hall has been converted into a plenary meeting hall seating 100 with all the necessary facilities.



