

Biodiversity Park By BolognaFiere, themed area for Expo Milano 2015

“Expo’s greenest themed area” will be created by BolognaFiere and SANA, the International Exhibition of Natural and Organic Products. Spread over 8,500 m², the site will include a park, a theatre and two pavilions: it will represent a global showcase for organic agriculture and the wealth of agricultural biodiversity within Expo Milano.



Biodiversity Park, the themed area created by BolognaFiere for Expo Milano 2015, is an exhibition space of 8,500 m² dedicated to biodiversity and agricultural-biodiversity and their significance to the Expo theme of “*Feeding the planet, Energy for Life*”.

Biodiversity Park, where nature and culture combine, will showcase Italian excellence both in terms of the environment and agricultural production, visitors will be able to take centre stage in a unique experience that includes authentic descriptions dedicated to the themes of nutrition and the future of the planet, the global challenges to ensure food supplies and sustainable development, and how respect for nature is fundamental for dealing with these issues. The visitor experience has a clear reference to agricultural biodiversity, its evolution and how it can be safeguarded, also thanks to agricultural methods such as organic farming, which plays an important role in the conservation of the environment and the safeguarding of biodiversity.

Visitors will have the opportunity to discover, learn and experience through a schedule of initiatives, meetings and events, multimedia experiences and interactive entertainment set in the context of Italy’s unique natural heritage.

BIODIVERSITY PARK: ITALIAN AGRICULTURAL BIODIVERSITY WAITING TO BE DISCOVERED

THE BIODIVERSITY PARK PROJECT

Biodiversity Park is spread across two large spaces:

- an external space, where visitors can walk and experience the biodiversity of Italian landscapes and an indoor space, in which visitors can learn about the history of biodiversity, the experiences and excellence of the organic sector, both within the Natural and Organic Pavilion and in the auditorium /“The Theatre at the Centre of the Earth”, where a six month programme of activities and events will be held.



In the introductory section there will be an entire segment dedicated to illustrating the link between organic agriculture and biodiversity; a link that can be experienced in every corner of the Park, where biodiversity and organic agriculture live together in a close relationship of continuous cross references.

These physical spaces, the stage for experiences, debates and learning, will engage with a public from all over the world through the Web and social media: a universal echo spreading knowledge about Italy through the excellence of its landscapes, environments, farms, food producers and businesses, capable of facing the future challenges to achieve balanced, sustainable and fair growth.

The Biodiversity Park project has been created through a partnership between Expo 2015 and BolognaFiere S.p.A., with the collaboration of FederBio, in partnership with the Ministry of Agricultural Policy and the Ministry for the Environment, both ministries will have a presence within the park and will be creating a range of initiatives.

THE GRAND TOUR OF ITALY

Of all the European nations and also on a global level, Italy has one of the most varied collections of landscapes and ecosystems.

Following the peninsular from North to South it is possible to observe an extraordinary succession of environments: hilly and mountainous landscapes run in parallel and just a short distance from coastal systems. The Biodiversity Park begins by inviting visitors to experience a short but intense journey along the length of Italy. A remarkable biodiversity of flora and fauna in relatively concentrated areas can be found within Italy's distinctive and particular geography. In addition to this diverse natural heritage, over the course of the centuries another equally varied and characteristic dimension has been added, that of cultural heritage.

The long peninsular, formed by ancient geological processes and located at the centre of the Mediterranean, has been the site of numerous encounters and clashes between cultures. The continuous process of the modification of the countryside, the cities and the landscape as a whole, has made Italy resemble an open-air exhibition showing the spread of knowledge along a territorial corridor that is waiting to be visited.

In the 17th Century the richest European families began to send their young people on long visits to the *Belpaese* as a way of completing and refining their cultural education. Soon they were joined on the Italian itinerary by poets, writers, scientists, artists and those with an appreciation of beauty. The Grand Tour of Italy from the Alps to the islands of the Mediterranean offered a unique opportunity to admire landscapes of rare beauty. The sequence of the diverse landscapes seen from North to South was like a formidable open book explaining not only the fundamentals of farming but also of art, engineering, politics and economics.

...A JOURNEY THROUGH THE ITALIAN LANDSCAPES

The voyage through the best of Italy's landscapes takes in five stops and five different types of landscape:

From the plains with the open expanses of arable land and terraces, from the alpine pastures to the Mediterranean gardens: all of these landscapes can be experienced in the outdoor area of Biodiversity Park, where the five landscapes/ climatic areas of the Grand Tour of Italy are presented, including a sample of Italian farming landscapes that have transformed the Italian countryside into what we now see as we travel across the peninsular.

- THE ALPS
- THE APENNINES

- THE PO VALLEY
- THE UPLAND PLATEAUS
- THE ISLANDS

The typical landscapes of these five areas are presented through exhibitions that include vegetation, the natural biodiversity and agricultural biodiversity of each area: not individual trees but groups of plants, green landscapes that, seen together, tell stories, convey emotions and inspire new future projects.

The five areas demonstrate the agricultural biodiversity, the qualities of the different cultivations both due to characteristics of the land and the differences in the botanical environment, at the centre of each environment is a visitor route that begins as a path that becomes a country track that then transforms into a cattle drovers' road and ends up as the mule track that runs along the coast.

In this *Grand Tour* visitors can enjoy the rare treat of viewing Italy's natural heritage in its entirety, experiencing a series of rural environments intended as parts of the landscape and not as a miniaturizations of the Italian territory.

The path through the Alpine area leads along a unique system, where variances of just a few degrees of latitude or longitude or slight differences in altitude determine notable changes in the vegetation and fauna: visitors can pass from a typical Mediterranean area to the alpine pastures to the perennially snow covered areas that have more in common with arctic terrain.

Then visitors can walk along the Apennine backbone, a varied and rich environment, that allows us to cross from the North to the South of the boot of Italy observing changes in the landscape, flora and fauna from each area to the next and from one region to another. *Imagine the wide open spaces of the Po Valley with fields and arable land bordered by ditches and patches of woodland and following dusty country roads or smell the scent of the typical agricultural produce of Puglia or Basilicata in the upland plateaus and then linger on the mule tracks and enjoy the charming beauty of the Mediterranean coastline.*

The Italian pathway then reaches an orchard of citrus trees planted in vases, just as in the historical Italian gardens where the fruit plants were protected during the winter months inside greenhouses and then taken outside during the warmer months.

The orchard represents the epitome of a productive garden that is never idle.

The orchard accompanies the journey to the fifth and final area that illustrates the scenario of urban agricultural biodiversity. A short outline of the future of our cities where building projects will sustain or entwine with a new agricultural project capable of best utilizing modern technology and services. Here the domesticated natural landscape meets the urban: vertical gardens, urban vegetable patches, examples of re-naturalization of the city will be on display in the space bordering the Eastern entrance to the EXPO exhibition site, forming a gentle way to enter or leave Biodiversity Park.

FROM THE EXTERNAL AREA TO THE INTERNAL PAVILIONS

The pavilions grow around the orchard

The Biodiversity Exhibition

THE THEATRE AT THE CENTRE OF THE EARTH, a space for meetings, initiatives and debates

THE NATURAL AND ORGANIC PAVILION

THE HISTORY OF BIODIVERSITY: THE EXHIBITION

In this area, inside the Park, the history and details of themes relating to biodiversity take centre stage. This is a space where the contents also become the setting, where the most innovative technology and the latest (social) media support the great tradition of Italian exhibition design: an exhibition that does not aim to provide the answers, but rather to elicit further questions from its visitors.

The exhibition layout is made up of nine main circular spaces and four secondary spaces that will host content from some selected institutions participating in Expo 2015.

The visitor experience and the contents of the exhibition in the internal spaces follow a circular design. The visitor enters into the 'introduction' section and from there can decide to proceed in a clockwise direction (visiting from the past towards the future) or anti-clockwise direction (from the future towards the past).

The exhibition created by the Scientific Committee for Expo is set out according to a formula of 7 sections +2:

- 1. Introduction to the theme
- 2. Wild: biodiversity before the advent of agriculture
- 3. Domestication, cultivation and agricultural biodiversity
- 4. The great journeys
- 5. Crop rotation
- 6. The green revolution
- 7. Beyond the green revolution
- 8. Innovation, technology and a future that is already here
- 9. ...and so?

The first section and the last are fundamental steps for understanding the park as a whole: beginning with an introduction that focuses on the key principles of the debates and the open questions relating to the theme. The final section (...and so?), recalls the 'immaterial' content that is part of the overall

communication system: the six month programme, the Website, the community active on social media, the application and the MOOC (Massive Online Open Course), which all refer to the central theme.

THE THEATRE AT THE CENTRE OF THE EARTH

Conferences, discussions, demonstrations, keynote lectures with high profile guest speakers. For each of the exhibition's 184 days, Biodiversity Park will play host to a must-see event, enabling the public to observe and experience the world of the natural and organic in its every sense. The six months of Expo will include a lively calendar of events including appearances from experts from all over the world, university professors, renowned names connected to green issues, the environment and food, but also figures from the organic sector and small and large businesses from Italy and abroad. The objective is to examine the relationship that exists between food and humankind and how it has evolved over the centuries, while also listening to the experiences of those who have chosen to produce food in a different way. Space will also be made for discussions of issues such as the regulation and future potential of the organic sector in order to create new avenues for growth, the development of conscious consumption and sustainability; leading voices on environmental issues will give speeches about the state of the planet.

THE NATURAL AND ORGANIC PAVILION

At the heart of Biodiversity Park is the location where visitors can discover one of the standouts of Italian agriculture, its organic produce. The Natural and Organic Pavilion is the only space at Expo dedicated entirely to Natural and Organic produce and Biodiversity, visitors can learn about all of the links in the production chain for ecological, safe and sustainable agriculture capable of meeting the challenge of "Feeding the Planet, Energy for Life". The pavilion will represent a meeting place for opinion leaders from the sector, an incubator for new ideas and a networking platform for all stakeholders. To conclude, by its very nature, Biodiversity Park is the naturalistic centre of Expo 2015, even more importantly, it is a space from which to observe Expo with a clear focus on the central role of agriculture and agricultural biodiversity. BIODIVERSITY PARK is, therefore, engaged in a constant dialogue with its context and surroundings.

The wealth of agricultural biodiversity for “Feeding the Planet”

Curated by the Scientific Committee of Biodiversity Park

THE CONCEPT

“Biodiversity, the variety of living forms on the Earth, is the key to the conservation of the world: it is this variety, in fact, that guarantees the ecological balance of that great living system that is planet Earth...”

“...there is no objective more inspiring than that of launching the era of renewal, recreating the magnificent diversity of life that still surrounds us

Edward O. Wilson, "The Diversity of Life", 1992

The term “biodiversity” was used for the first time by T. Lovejoy (1980) in his extended version of “biological diversity”. E.O. Wilson defined the word “biodiversity” for the first time as “BioDiversity” to the *National Forum on BioDiversity*, held in Washington D.C. from 21-24 September 1986. With the publication of the discussions from that symposium (Wilson 1988) biodiversity began to gain notoriety and an international profile.

An important development in the spread of the term and the concept of biodiversity occurred in 1992, when a conference was organized in Rio de Janeiro by the United Nations on the subject of the Environment and Development (UNCED). Referred to at the time as the ‘Earth Summit’, the event saw the approval of the Convention on Biological Diversity, which has now been ratified by 192 countries.

WHAT IS BIODIVERSITY?

“The term biodiversity refers to the variety of forms of life on Earth, the fruit of long and complex evolutionary processes. The term includes the combination of life forms and their reciprocal interactions, as well as the physical environment that has made Earth habitable for humankind”.

Source: the Convention on Biological Diversity (CDB)

In addition to the so-called natural biodiversity, another type of biodiversity exists, that of cultivated vegetation and animals reared in agricultural contexts, agricultural ecosystems and agricultural landscapes. The term agricultural biodiversity refers to all of these.

Agricultural biodiversity, although only a subcategory of biodiversity, opens up thousands of new frontiers connected to the variability and variety of life on earth. Agricultural biodiversity includes genetic resources of plants and animals, edible plants and crop cultivation, traditional varieties and

ancient recipes, animal husbandry, fish, micro-organisms, irrigation water and cultivated land, planted fields, types of agricultural business with all of the necessary components to provide society with goods and services of a various nature.

The widespread and diversified network of companies that are part of the planet's rich food agriculture system is, in fact, a privileged location where knowledge, expertise, management strategies for biological resources for rural development in diverse territories, policies for consciously developing the modern production chains that feed local and global markets, can be constantly advanced and conserved.

Agricultural biodiversity appears today, therefore, as an immense container of material and immaterial goods, available for sustainable development, which we cannot yet claim to fully understand. It is, therefore, impossible to speak of nutrition and the future of the planet without making clear reference to agricultural biodiversity, its evolution and its protection.

THE NATURAL AND ORGANIC PAVILION

Situated at the heart of Biodiversity Park, the Pavilion is a place where visitors can get acquainted with one of the standouts of Italian agriculture, Italy's organic produce.

The Natural and Organic Pavilion is the only space at Expo entirely dedicated to Natural and Organic produce. Visitors can learn about each link in the production chain of an ecological, safe and sustainable form of agriculture capable of meeting the challenge of "Feeding the Planet, Energy for Life". Together with the Theatre at the Centre of the Earth, the Pavilion will be the meeting place for opinion leaders from the sector, an incubator for new ideas and a networking platform for all stakeholders.

ORGANIC AGRICULTURE AND BIODIVERSITY

Organic agriculture plays a fundamental role in the conservation of the environment and the safeguarding of biodiversity.

The concept of biodiversity is a key part of the very definition of organic agriculture as "*...an overall system of farm management and food production that combines best environmental practices, a high level of biodiversity, the preservation of natural resources, the application of high animal welfare standards and a production method in line with the preference of certain consumers for products produced using natural substances and processes...*" (European Regulation 834/2007)

Organic agriculture is a system of production that supports the health of the land, the ecosystem and its inhabitants. It is based on ecological processes, biodiversity and cycles adapted to local conditions rather than the introduction of agents that can also produce adverse effects.

A MEETING WITH THE VALUES OF THE ORGANIC WORLD

The Natural and Organic Pavilion will demonstrate to visitors the key role played by companies committed to the protection of the environment and to biodiversity, in responding to the global challenge of EXPO Milano 2015 of "Feeding the Planet, Energy for Life".

Visitors will be able to learn how organic agriculture takes into consideration every living organism, from the smallest microorganisms on earth to the most imposing trees. For this reason each link in the production chain is designed to maintain and, where possible, encourage animal and vegetable diversity.

Organic agriculture, in fact, establishes:

- a ban on the use of pesticides or synthetic fertilizers and the use of organic compost that can generally avoid potential contamination and alteration of ecosystems and the natural habitats, thus encouraging a high level of wild biodiversity;
- the adoption of crop rotation, which implies a greater number of species and varieties cultivated, thus increasing the biological diversity on a genetic and specific level; the choice of cultivating local varieties of plants and indigenous breeds of animals, which are often overlooked by conventional agriculture, thus favouring the conservation of agricultural biodiversity;
- the use of predatory beneficial insects and parasites to control pests rather than synthetic chemical substances, this helps to diversify and develop animal life.

THEMED AREAS, 6 SECTORS SYMBOLIC OF OUR COUNTRY

The Natural and Organic Pavilion is set out in six themed areas, six narratives for six key symbolic sectors for Italy. Each area describes the link between the land and its produce, the foods that we use each day.

Seeds, cereals, legumes and their derivatives

Fruits, vegetables and their related products

Oil and wine

Livestock produce

Herbal remedies, supplements, wellbeing

Services, technology, training and qualifications

Each area will describe the outstanding achievements, the stories of farmers who through their commitment, passion and innovation have helped to safeguard the natural ecosystems and biodiversity both within and outside their farms. Display space will be provided for the cultivation of products showing both innovative and more traditional techniques for maintaining the balanced relationship between man and nature that is at the heart of organic farming. The display will be based on multimedia technology with cross-referencing to the land and the actual products. There will also be space provided for theoretical concepts and their practical application in order to examine the relationship between nature and the individual in greater depth.

Discussions and 'hands on' workshops, will take place inside the Pavilion where the explanations of key words will be accompanied by direct experience of the use of foods and the produce of the land in order to discover and touch the living elements of organic farming and biodiversity.

Also present in the same space will be a bookshop, where a selection of current texts will enable visitors to learn more about the themes of biology and eco-sustainability.

The sensorial route through the world of natural and organic will terminate with the organic **Bio store**, in partnership with **NaturaSi**, a shopping experience that enables visitors to participate in organic agriculture and exercise the values of organic production, and with the organic **Bio restaurant**, in partnership with **Alce Nero**, a location where a deep knowledge and passion for organic produce is blended with the skill and imagination of the chefs to guarantee healthy and innovative cuisine. The menu will vary according to the season and will use regional ingredients selected from traceable, fair-trade suppliers.

THE SCHEDULE OF EVENTS AT THE THEATRE AT THE CENTRE OF THE EARTH

The beating heart and the focal point for the main events, the Pavilion's theatre/auditorium has been given the meaningful and emblematic name "The Theatre at the Centre of the Earth".

There are six themes around which the schedule of events will be developed in order to provide space for a key issue in each month of Expo 2015:

- May is dedicated to the great **agricultural heritage**.
- in June the focus is on **safeguarding the territory and biodiversity**.
- July will highlight **the excellence of organic produce in Italy**

- August will focus on **ethics and fairness**.
- in September **wellbeing, digestion and allergies** will be examined.
- October will be dedicated to **technology and innovation**.

In order to meet the needs of a diverse visiting public at Expo, each of the 184 days of the exhibition will be divided into different time slots containing different forms, formats and offers in order to appeal to all visitors, from the youngest to the oldest from experts in the sector to members of the public with an interest in nature and biology.

The schedule will include recognised international days of the calendar such as 15 May, International Family Day; 22 May, the International Day for Biodiversity, which will include important guests who will celebrate the day in the Park in collaboration with representatives from the Ministry of the Environment. In July there are two special days: 11 July is World Population Day and 18 July is Nelson Mandela International Day, a time to reflect on universal rights such as peace, environmental sustainability and justice. On 9 August there will be a focus on other cultures and different lifestyles in celebration of the International day for Indigenous Populations; on 12 August, International Youth Day provides the opportunity to speak to the new generations about consumption and choices. In autumn the equinox (on the 23 September) will be celebrated and on the third weekend of September, the Italian part of the International initiative "*Clean Up the World*" takes place. On the first Monday of October, World Habitat day aims to reduce the impact of natural disasters and on 16 October, another important date, World Food Day.

The schedule of events is curated by Vittorio Bo in close cooperation with the Scientific Committee.

COLOPHON

BIODIVERSITY PARK

Official Partner: **Bologna Fiere**

Steering Committee:

Duccio Campagnoli, President of Bologna Fiere; **Piero Galli**, Director General of Event Management at Expo Milano 2015; **Paolo Carnemolla**, President of FederBio ; the Ministry of Agriculture; the Ministry of the Environment.

Scientific Committee:

Dr. **Emilio Genovesi** Coordinator

Dr. **Vittorio Bo** Coordinator

Prof. **Stefano Bocchi**, Faculty of Agricultural and Environmental Sciences. University of Milan

Prof. **Telmo Pievani**, Faculty of Biology, University of Padua

Prof. **Andrea Segrè**, Faculty of Agricultural Science and Technology, University of Bologna

Architectural and landscape planning: **Fabio Fornasari**

PAVILION OF NATURAL AND ORGANIC ITALIAN PRODUCE

Official Partners: EXPO Milano 2015

Bologna Fiere

Bologna Fiere partners

**FederBio, Confederation of Italian Farmers,
Cosmetica Italia, FederUnacoma Bologna
City of food**

Technical Partners of BolognaFiere

AlceNero, Cosmoprof, Cosmofarma,
Latifolia
Erbolario, Iritech, NaturaSi