



# Description of EcoWise Italy residential trips:

Below is a list of titles for our residential trips. Trips generally last between one and five nights. The age of the students determine the specific details of trip themes, activities as well as the level of academic content and learning objectives. The length of stay, season and weather conditions also factor into trip planning and location.

## Discovering ecosystems and habitats

This residential trip aims to compare and contrast a range of native ecosystems and investigate their biotic communities, ecological structures and functional dynamics. Students will visit a different ecosystem every day and encounter a wide array of organisms in safe and stimulating natural environments while learning about key concepts in ecology and biology. We will explore an ancient broadleaf woodland, a pristine freshwater stream, a flower-rich traditionally managed meadow and a biodiverse river and riparian zone. At each site, students will learn to recognize the ecosystem's fundamental characteristics, discover its wild plants and animals and learn about its environmental history, management and conservation status. Students will also be encouraged to be aware of their own reactions to, and personal impressions of these ecological spaces as they interact with them, so that they can catalogue and record their experiences. The trip will enable students to explore the natural world through hands-on activities that help them to develop their sensibility to ecological processes and understanding of natural habitats while having a great outdoors adventure.

## Amazing biodiversity field studies

During this trip students will discover what biodiversity means in practical and conceptual terms and will find out for themselves how a rich natural biodiversity is an intriguing, valuable and essential part of the natural world and our cultural heritage. Fun activities and hands-on educational games will help students to realise how much variety there is in the natural world and how exciting it is to experience wildlife in the field. They'll explore a range of natural ecosystems and discover what makes one species distinct from another and discover how difficult it is to accurately define and quantify biodiversity in the real world. We will also introduce the concepts of rarity and extinction, and learn why some species are more prone to becoming endangered than others. We will consider why biodiversity is being reduced by modern industrial society and explore the reasons that human modification of the natural world tends to lead to habitat destruction, fragmentation and species extinctions. We will discover how cultural diversity and biodiversity are interrelated and how many traditional societies have linguistic connections to nature, and cultural awareness of the biotic wealth in their local landscapes.

A series of educational activities and games will help students to understand some of the consequences and effects of the loss of biodiversity and some of the main strategies to help conserve biodiversity at all levels. This exciting trip will help students to deeply appreciate how essential healthy biodiversity is for the planet's ecological integrity and our own social well-being.

## The endangered European wolf, a case study

During this interdisciplinary field trip we will learn about the wolf in terms of its biology, ecology and its historical relationship to humans. We will examine attitudes towards wolves around the world and learn about their history of persecution. The area where we site the field trip is particularly exciting because it has been re-colonised by a few packs of wild wolves! Students will hike into wild, mountainous wolf habitat to search for clues into their lifestyle while trying to find tracks and signs of this illusive animal. They will engage in role playing games, learn tracking and field biology techniques and explore the topic using a range of learning tools and environmental education activities. We will also learn about why wolf conservation is so complex and controversial and how we need to consider economics, politics

and environmental ethics when trying to understand the social issues related to the realities of wolf conservation in practice. Students will study the range of conservation policies and management practices available to scientists studying and protecting this flagship species. We'll visit the Alpi Marittime Park Wolf Conservation Centre to meet a prestigious wolf biologist and see the centre's wolves and interpretive displays. This is an action packed trip in a very special wilderness area where groups can also choose to engage in adventurous activities such as rock climbing and white water rafting as a part of the trip schedule.

## Exploring ecological networks

This program provides a basic introduction to the fundamentals of ecology and focuses on interconnectivity and interdependence as intrinsic characteristics of biological systems. Students will engage in a range of hands on activities and games in beautiful natural landscapes to help them appreciate how organisms in living systems are interrelated to each other and the abiotic environment, living in complex networks regulated by cybernetic feedback mechanisms. We'll explore concepts such as the principle of emergent properties, networks, feedback loops and the Gaia theory, and begin to explore the ways that the biosphere modifies planetary conditions to favour terrestrial life and biodiversity. Students will engage with a range organisms in their natural habitats and conduct cooperative group work problem solving exercises to explore ecological relationships and our embeddedness in the natural world. This trip is designed to enrich students' knowledge and experience of ecological systems in the light of new holistic paradigms in the biological sciences. It will provide them with exciting opportunities to interact with living systems as a means of reinforcing and complimenting their classroom based science syllabuses.

## Journey into human evolution

This residential program will focus on scientific theories of human evolution and the evidence that has been found that support these ideas.

This exciting trip aims to help students grasp the fundamental ideas of human evolutionary theory in a practical and fun educational setting, where they actually experience some of the environmental challenges that our human ancestors would have had to deal with in order to survive. Students will be encouraged to think critically and to realize that our knowledge of human evolution from the fields of palaeontology and paleoanthroplogy is based on the interpretation of limited evidence and the development of scientific hypotheses that change over time as evidence is discovered or reinterpreted. We will also explore some other non-scientific creation theories, mythologies and beliefs that explain how human beings came into existence.

During the program participants will make primitive shelters, try making simple tools from natural materials, search for fossils and experiment with primitive methods of fire making and rock art. We will also play a series of educational games focused on tracking, hunting and gathering, as well as exploring various approaches towards non verbal communication and social organization in group role playing games. This trip is guaranteed to stimulate students' imagination and creative expression while exploring a fascinating field of study. It will also be a great opportunity for them to bond together and do group work in an stimulating and wild natural landscape.

## Saving habitats through protected areas

This residential program aims to explain what nature conservation is, why nature needs to be conserved and what the main tools for its conservation are. We will see how protected areas are the major means for practically conserving biodiversity and will visit and get to know a spectacular protected area to see how such a reserve works in practice. A mix of problem solving exercises and exciting wildlife field studies will stimulate students' curiosity and help inform them about some of the issues and challenges involved in real life conservation projects and get them into some wild and spectacular locations. The trip will involve hiking and field work as well as various role playing games and drama presentations to

help students explore our responsibilities and ethical relationship towards the natural world and future generations. We will also consider various political aspects of nature conservation using protected areas and analyse some of its wider social justice and philosophical implications. Although this program is focused on the science of conservation biology, its interdisciplinary nature will inform students about larger political and economic issues that effect practical nature conservation in the real world. This promises to be an enlightening and exciting trip that takes place in a wild and ecologically rich protected area where students will be exposed to topical issues in a deep and memorable way.

## Water resources and fresh water ecology

This residential trip about water, the water cycle, hydrogeological processes, and aquatic ecology, focuses on natural aquatic landscape features such as streams, rivers and lakes. We will also consider the importance of aquatic resources to human society and study the availability, treatment and human geography of water in a global context. As part of this didactic process students will take part in a role playing activity and represent the proportion of the Earth's fresh water that is available to people in a creative spatial parcelling game. Students will be involved practical activities and conceptual exercises that enable them to discover for themselves why water resources are essential for human and environmental health and how complex it is to fairly distribute and conserve the limited fresh water that exists on a crowded planet. We will use dance and movement to discover how a water molecule moves through the water cycle and do some simple and fun experiments to learn about some of water's fundamental physical and chemical characteristics.

We'll hike to the upper reaches of a pristine mountain stream to discover where the water comes from and where it goes and how it shapes the mountain environment and landscape. Participants will have an opportunity to get their feet wet while searching for and learning to identify some macroinvertebrates, fish and other river organisms. We will learn about the lifecycles and ecology of these aquatic organisms and discover why they rely on, and are indicators for, clean and unpolluted water. They will also use natural materials to create sculptures and artistic representations of the place and their experiences of it.

We will visit a nature reserve located on the mid reaches of a large river to learn about water erosion, material transport and deposition and study the area's rich riparian ecology and wildlife.

The trip also offers an opportunity to visit a pristine glacially formed lake to study its limnology, seasonal cycles and biodiverse natural history. This adventurous and interdisciplinary trip offers an exciting and memorable learning experience and provides some fascinating insights into a natural resource that is of increasing environmental and political importance.

## Alpine wilderness mountain adventure

This residential trip is a unique opportunity to explore some of the wildest mountain ecosystems in Europe, habitat to wolves, chamois, ibex, red deer, bearded vultures and golden eagles. We will be studying how organisms are adapted to survive in these challenging Alpine conditions and ways that mountain cultures have evolved to inhabit and live harmoniously in these remote landscapes. This trip will involve plenty of exciting hikes into forested valleys and high altitude plains so that students can experience the splendour and spatial realities of mountain life. We will be studying mountain ecology and biogeography as well as learning some tracking techniques and field biology methods. We'll visit some endangered species' sites and learn about conservation projects and the challenges of protecting the wild natural landscapes and their biodiversity. We'll visit some remote abandoned traditional villages to discover some of the secrets of how people used to make their living and homes in the mountains, learning about their economy, ethnobotany and traditional relationship to the natural world. There will be opportunities to engage in optional activities such as rock climbing, white water rafting and other outdoor pursuits that take advantage of the rugged landscape, as well as a fun traditional dance workshop and visits to cheese makers and traditional shepherding families. This trip will enable students to engage with some of the wildest landscapes in Europe, experiencing the power and

dynamism of a pristine Alpine environment while having a memorable and interdisciplinary learning experience deep in nature.

### Geological time and change in nature

This residential program focuses on forces that drive changes in nature. We will explore the Earth's formation and geological history and delve into the mysteries of the origin of terrestrial life and biological evolutionary processes. We will consider geological, biological and human forces as they relate to environmental change and put them in context of relative timescales.

We will also focus on the impact that the human species has had on the planet's environmental history and how recent human induced changes have effected the natural world through such phenomena as global warming, the extinction crisis, pollution and habitat loss. We will examine some of the reasons for these anthropogenic changes and explain why they tend to be rapid and detrimental to natural landscapes and biodiversity.

Students will engage in a selection of exciting educational outdoor activities in evocative and wild natural locations, for example, a 'time machine' game where they will make voyages to a range of prehistoric landscapes to explore their ancient environments and a creative story-telling game focused on the historical and cultural elements in the landscape. We will also get students to explore an area and search for evidence to form their own hypothesis about how the place has changed over time. Other activities will introduce elements of landscape analysis and help them to understand how the past has helped to shape the contemporary landscape. This is an interdisciplinary program that helps students to comprehend the major natural and anthropogenic forces that shape our world and some dynamic processes affecting environmental stability and flux.

### Green art sojourn; creative expression inspired by nature

This trip aims to awaken and nourish students sensibility to the natural world and encourage them to explore natural space using the full range of their senses, imaginations and creative faculties. We will focus on using natural materials collected from the countryside to create a range of craftwork and objects, as well as visual art pieces such as sculpture and collage making. We will experiment with making pigment from plant materials and minerals and then use what we've made to paint and draw on various mediums. We'll learn to make musical instruments from wood and other natural mediums and create 'wild sounds' and 'green rock' in evocative natural locations. We'll explore some cultural practices that use music as a means of communication and interaction with nature by taking part in an exciting African drum workshop taught by a master musician and dancer from Senegal.

Some introductory studies of ethnobotany will help us discover ways that indigenous peoples have always used wild plants to obtain their food, medicine and other resources for their day to day existences and material economies.

Children will also explore some traditional dances and folk rituals to see how they are inspired by nature and enacted as a means to connect human society and the natural world. Students will have an opportunity to create costumes and dress-up to create their own dances and ritual dramas leading to group performances. This trip promises to stimulate students' imagination and creative expression and help them to explore their relationship to the natural world and each other while having a fun and exciting adventure in the wild.

**Ecwise Italy**

Strada Faitaria Cairola 14

10020 Casalborgone (TO), Italy

+39 0119185065; + 393401024513

info@ecowiseitaly.com

www.ecowiseitaly.com