

OPERATION WALLACEA

Romania School's Booklet 2026



Contents

1. Study area and research objectives.....	2
2. Itinerary for Schools	4
Structure of the expeditions	4
Itinerary for Saxon Valley Surveys.....	5
3. Research Activities.....	6
Grassland Plants.....	6
Butterflies	6
Farm Surveys.....	6
Bird Point Counts.....	7
Bird Ringing	7
Small Mammals: Mice	7
4. Lectures and learning outcomes	8
Transylvania Ecology course	8
Learning outcomes.....	9
5. Links to A-levels	10
Reading and research questions	12
How does it work?.....	12
ID Guides	13
Research areas and activities being carried out in Transylvania:	13
Useful contacts/information.....	14

1. Study area and research objectives

The Saxon communities of the lowland Carpathian Mountains have traditionally managed the Transylvanian landscape since the 12th Century. Each of the 200 Saxon villages in the foothills of the Carpathians had a distinctive fortified church where the villagers took refuge in times of threat. The layout of these villages has remained virtually unchanged since the 18th century with village houses on either side of the valley stream, with each house having a strip of land at the rear. In addition, each household traditionally has strips of arable land and damp hay meadows in the valley bottom and larger parcels of hay meadows further up the valley. Taking a cross-section through the valleys of this region, the villages and arable strips of land would be found in the valley bottom with hay meadows and pasture for cattle and sheep above. Forest still covers the steeper slopes of the valley.

Different households own cattle and sheep but graze on the common unfenced pasture areas with a cow herd and shepherds accompanying them. The cows return each night to the village where they are milked in the courtyards and rest for the night, before returning the following morning to the communal grassland and graze under the supervision of a herdsman on the lower pastures. Sheep leave the villages in May and graze on the upper pastures in large flocks with shepherds, and do not return to the valley bottom until the onset of winter in November. The sheep are milked by the shepherds high in the valleys and the milk is used for cheese making. At night the sheep are fenced in sheepfolds with the shepherds sleeping in improvised places near the herd to prevent bear or wolf attacks.



Figure 1. Map detailing the region of Transylvania in the foothills of the Carpathian Mountains where the expedition shall take place.

This traditional form of farming has produced a High Nature Value landscape. In 2008 the European Union declared 250,000 ha of the Carpathian valleys as the Tarnava Mare Natura 2000 site with the whole area receiving protection as a Special Protected Area (SPA) under the Birds Directive and 85,000 ha as a Site of Community Importance (SCI) under the Habitats Directive. These designations aim to protect the traditional uses of the landscape that have produced this species-rich mosaic of habitats and species. The valleys hold one of the last lowland populations of European Brown Bears (closely related to the American grizzly and more than 4,000 animals remaining) as well as Wolves and threatened bird species such as the Lesser Spotted Eagle, Corncrake, and Woodlark, whilst the mainly oak and hornbeam forest areas are habitats for 9 species of woodpecker as well as the spectacular Ural Owl. The upland hay meadows, which have not been fertilised for centuries, contain a very diverse grassland flora and associated butterfly species whilst the wet grass areas contain Great Burnet the host plant for the Scarce Large Blue and Dusky Large Blue butterflies.

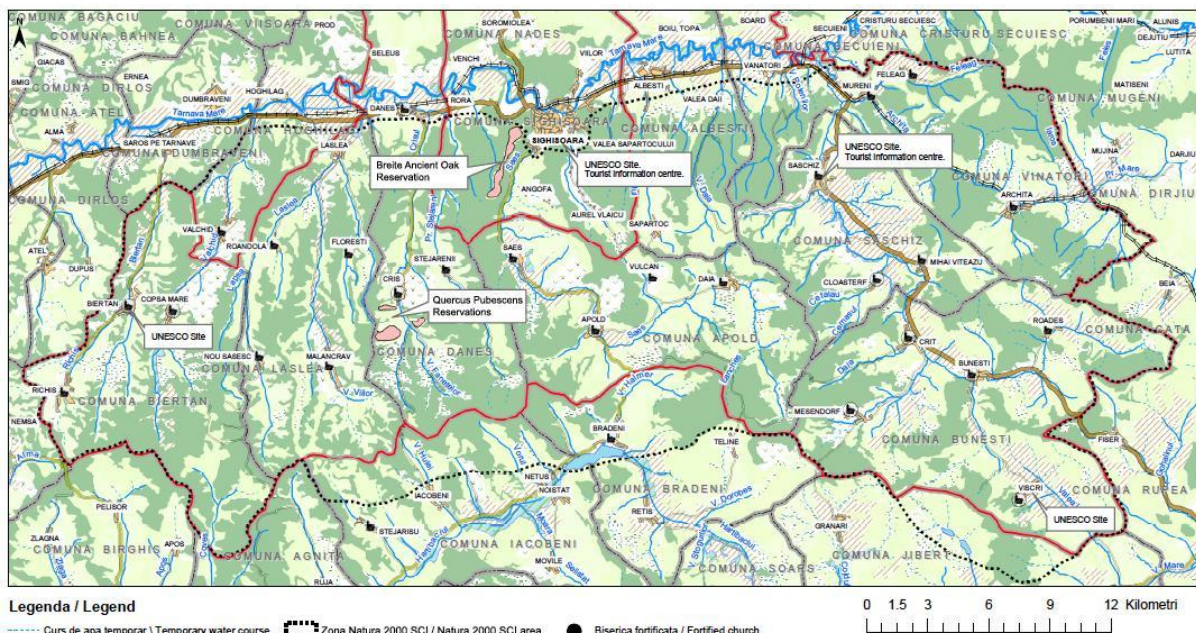


Figure 2. Map of the Tarnava Mare Natura 2000 region showing the saxon villages within the area. Both maps courtesy of Fundatia ADEPT

This Saxon landscape and its associated populations of European flora and fauna, once seen over much of lowland Europe, is a rare survival. These kinds of lowland High Nature Value landscapes have almost disappeared in the rest of Europe. But this remarkable area is under significant threat. In the 1990s many of the Saxons returned to Germany and their houses and farmsteads were allocated to other ethnic groups (Roma, Hungarians and Romanians) who were not experienced in the traditional farming techniques that had been practiced by the Saxons for centuries. Opwall is partnered with a local NGO, Fundatia ADEPT that initially helped make the case for the Natura 2000 designation, and helped the design of EU farm payments to protect this area. ADEPT and Opwall have now established an annual monitoring programme to assess the effectiveness of the designation and farm payments in protecting the high conservation value of the landscape.

Students will be trekking through the spectacular scenery of the foothills of the Carpathian Mountains. They will stay in a small Saxon village for 5-6 nights in one of the river valleys, to complete surveys in that valley, before the team moves over the hills to the next area. Accommodation will be in Saxon guesthouses, dormitories, or camping in tents, depending on the site being surveyed. The local villagers will provide the food and guides for the surveys and long treks. During the 2026 season at least 8 valleys within the Special Conservation Area will be surveyed.

2. Itinerary for Schools

Structure of the expeditions

The group will fly into Cluj-Napoca International Airport on a Tuesday and be transferred to Sighisoara, the closest town to most of the villages, which is approximately 3 hours away. Staying in a hotel overnight, the group will have the opportunity to explore Sighisoara the following morning before being picked up at around midday and taken to the first village.

This is an expedition where the flights can be purchased online from the budget airline Wizzair (<http://wizzair.com/>) to Cluj-Napoca and the arrangements for the transfers to and from the airport can be made by Opwall (internaltravel@opwall.com).

This expedition is different from the other Operation Wallacea Expeditions in that the teams are mobile throughout the two weeks and will be spending 6 nights in two picturesque Saxon villages of the foothills of the Carpathians. Each team will visit key survey locations in the nearby valleys and villages. Whilst based in the villages the group will split into teams that will complete surveys of the valleys and hills with the following objectives:

- To quantify the relative abundance between years of wolves, bears and other large mammals from reports of attacks on sheep, signs and camera trap footage.
- To quantify the relative abundance between years of birds from replicate bird point counts.
- To quantify the relative abundance of mice between years through repeated annual trapping efforts.
- To quantify the relative abundance and health of bat species and numbers between years through repeated annual trapping efforts.
- To quantify the relative abundance and diversity of butterflies between years by repeated annual transects and for moths by light trapping.
- To quantify changes in the landscape such as changes in the classification of grasslands (between high and low nature valued), changes in field size and crops to be correlated with changes in sheep flocks and cow herds.
- To quantify changes in the distribution of target meadow plant species from repeated annual quadrat surveys.

Itinerary for Saxon Valley Surveys

The survey areas are located in the North East, central, and West of the Sighisoara Tarnarva Mare Natura 2000 site. Survey sites have been chosen using aerial photographs and they will sample a significant area of the Natura 2000 site and concentrate in particular on biodiversity hotspots.

In each area, the students will be split into one of five groups and over the two weeks will have the chance to participate in each of the study teams for two days. They will also have the opportunity to try and locate bears, visit local farms, attend local cultural festivals and experience the unique architecture of the area (the Natura 2000 site has three UNESCO World Heritage sites).

Table 1 Indicative schedule for the school groups in Transylvania

Day	Activity
Tuesday	Arrive in Cluj-Napoca and transfer to Sighisoara
Wednesday	Arrive and move to village 1 to be surveyed. Introductory lectures and divide into 4/5 teams.
Thursday	Village 1 surveys – farm team, grassland team, birds BPC team, bird ringing team, bats team, small mammal team, large mammal team and butterfly team
Friday	Village 1 surveys –farm team, grassland team, birds BPC team, bird ringing team, bats team, small mammal team, large mammal team and butterfly team
Saturday	Village 1 surveys – farm team, grassland team, birds BPC team, bird ringing team, bats team, small mammal team, large mammal team and butterfly team
Sunday	Village 1 surveys –farm team, grassland team, birds BPC team, bird ringing team, bats team, small mammal team, large mammal team and butterfly team
Monday	Village 1 surveys – farm team, grassland team, birds BPC team, bird ringing team, bats team, small mammal team, large mammal team and butterfly team
Tuesday	Village 1 surveys – farm team, grassland team, birds BPC team, bird ringing team, bats team, small mammal team, large mammal team and butterfly team
Wednesday	Move to village 2
Thursday	Village 2 surveys – farm team, grassland team, birds BPC team, bird ringing team, bats team, small mammal team, large mammal team and butterfly team

Friday	Village 2 surveys – farm team, grassland team, birds BPC team, bird ringing team, bats team, small mammal team, large mammal team and butterfly team
Saturday	Village 2 surveys – farm team, grassland team, birds BPC team, bird ringing team, bats team, small mammal team, large mammal team and butterfly team
Sunday	Village 2 surveys –farm team, grassland team, birds BPC team, bird ringing team, bats team, small mammal team, large mammal team and butterfly team
Monday	Village 2 surveys – farm team, grassland team, birds BPC team, bird ringing team, bats team, small mammal team, large mammal team and butterfly team
Tuesday	Finish at the final village at 10 am and drive back to Sighisoara. Morning surveys are possible, albeit unlikely, depending on timing.
Wednesday	Transfer from Sighisoara to Cluj for flight

3. Research Activities

Grassland Plants

The plant team will be focusing on 30 target species which are good indicators of grassland types or have medicinal use. Transects will be completed in low, medium and high nature-value grasslands along the different sample routes where the presence of different key species will be noted. Because this area contains some of the most diverse grasslands in Europe this project will be a chance to work in a spectacular and rarely seen habitat.

Butterflies

The butterfly team will be covering the same 50m transects as the plant team, recording the butterflies encountered and using sweep nets to catch and identify the rarer species.

Farm Surveys

The farm survey team consists of one staff member and one translator who make an effort to visit local farms and use questionnaires to gain data on the numbers of sheep and cattle in pendulation, crops grown, machinery used, and the area of land owned. While students do not accompany these visits in order to not overwhelm the farmers, the farm survey team simultaneously arranges visits to take place at a later time, to allow the students to see subsistence farming and give a unique insight into the culture of rural Transylvania.

Bird Point Counts

The team will walk one of three transect routes (East, West, and valley bottom) starting at dawn until late morning and stopping every 500M for 10-minute point counts to record all the birds seen or heard. If any species of particular interest (such as the woodpeckers, corncrakes, and owls) are recorded, the team will try to return to the area for callbacks and mist netting for further study. Note the routes and times spent on each activity need to be recorded carefully so they can be replicated in future years.

Bird Ringing

A bird ringing program is underway alongside the local Romanian bird group Milvus, where mist nets are set up in the same location each year. Birds are ringed and recorded, and all recaptures of birds rung in previous years are noted and recorded. Students will have the chance to be directly involved in the process, with the supervision of the head scientist.

Small Mammals: Mice

The aim of this survey is to evaluate species diversity, abundance, and distribution across different habitats in the valley. To accomplish this, small mammal traps will be strategically set in a variety of habitats during the evening. The following morning, the team will check and carefully empty each trap. Every captured mouse will be marked to avoid recounting in future captures, and data such as weight, body length, and overall health will be recorded to assess population health and demographic trends. Students will actively participate in each stage of this process under the guidance of an experienced specialist, gaining hands-on skills in species identification, data collection, and proper handling techniques to ensure the ethical treatment of each animal.

Bats

Each evening at 9 PM, the team will set off from camp to deploy bat traps in key locations, starting with the village's fortified church, which serves as one of the best roosting sites for various species of bats. Bats frequently roost in churches, old barns, and cellars, so we target a variety of these structures, as well as nearby forests and water sources, to capture a representative sample of the bat population. We'll use mist nets set in church attics and around the building, alongside harp traps, to maximize species capture in these environments.

This survey focuses on assessing population trends, species diversity, and the overall health of bat populations in the area. Every captured bat will be identified by species, weighed, and measured to contribute data on demographic and health patterns. Students will be actively involved in each stage, from setting traps to handling and data recording, under the close guidance of a specialist. We will also use bat detectors to identify species in flight during the night, recording echolocation calls to gather additional data on species' presence and activity.

Large Mammals

This team will complete a long transect on both the East and West of the valley; recording all tracks and signs of bears and other large mammals and installing/checking camera traps to be

checked upon leaving the village. As the large mammals are of particular interest we can build as much presence information as possible. There will also be the opportunity to go out with an experienced village local close to dusk for the opportunity to see bears and other mammals.

4. Lectures and learning outcomes

Transylvania Ecology course

The students will also be completing a Transylvanian Ecology course comprising the following lectures:

Lecture 1 – Transylvanian Landscapes and Biodiversity Monitoring - In this lecture, students will explore the rich and diverse landscapes of Transylvania, focusing on key topics such as the role of Fundatia ADEPT, the stunning lowland of Carpathian Mountains, and a brief history of the region. We will also delve into the Natura 2000 site of Târnava Mare and examine the agricultural practices of the Saxons.

Additionally, this course will cover effective strategies for engaging citizens in citizen science initiatives. Students will learn to utilize two innovative apps developed by ADEPT for biodiversity monitoring: **Mozaic Earth**, which tracks land use in grasslands, and **SoilMentor**, designed for collecting data on important taxonomic groups, including butterflies, plants, birds, mammals, and soil health.

Participants will gain valuable insights into the ecological significance of the Carpathian Mountains while discovering how to involve local communities in conservation efforts through technology and citizen science.

Lecture 2 - Sampling techniques: This lecture explains the science behind the sampling methods students will be using and highlights the importance of indicator species.

Lecture 3 – Biodiversity in Târnava Mare: This lecture investigates the meaning of biodiversity, endemism, and hotspots and looks at the particular biodiversity in this area of Romania. There is a short biodiversity quiz at the end.

Lecture 4 - Classification 1: The principles of classification are explained and related to the herpetofauna (amphibians, snakes) and mammals of the Romanian Carpathians. Bears are considered in more detail which can lead to a discussion about trophy hunting and eco-tourism.

Lecture 5 - Classification 2: An introduction to bird classification and then a detailed look at the Bird diversity in traditionally managed landscapes - birds of Eastern Europe (corncrakes, owls, and woodpeckers). There is also a summary of the butterflies and moths found in the area.

Lecture 6 – Conservation strategies in Transylvania - This lecture asks ‘what is conservation?’ and then has a more detailed look at the conservation strategies used in Transylvania (EU Habitats and Birds Directives, ecotourism, traditional products).

Lecture 7 - Mice and Bats - This lecture highlights the essential roles small mammals play in ecosystems, serving as prey for various predators and aiding in soil aeration and nutrient cycling. As indicators of environmental health, their populations reflect habitat quality. We will discuss strategies for their conservation, including habitat preservation and the establishment of wildlife corridors. Understanding their significance can inform effective conservation efforts and emphasize the importance of maintaining biodiversity.

Learning outcomes

The students should achieve the following learning outcomes from the fieldwork, practicals, lectures, and discussions/activities:

- Be able to define traditional Saxon village farming methods
- Be able to identify threats to traditional farming practices and how these might affect the ecology
- Be able to identify key indicator species of traditionally managed hay meadows and pasture
- Be able to identify 10 species of butterfly
- Be able to identify 20 species of East European bird
- Be able to describe how bird surveys are completed and the advantages and disadvantages of each
- Be able to describe how bear populations are surveyed
- Be able to talk about small mammal importance in the ecosystem
- Be able to understand how a scientific study works and why it is important
- Be able to be familiarized with at least one method of survey for a taxonomic group
- Be able to describe nature conservation strategies for Transylvania

5. Links to A-levels

The following tables highlight how your Opwall expedition relates to the AS and A-level syllabuses across all exam boards. The red and blue blocks indicate that the keywords listed are covered on our expedition (through lectures, practical or discussion topics) and that these keywords are also within AS or A-level topics as shown.

Topic	Biology	AQA		C	CCEA		C.Int		Ed/Sal		OCR		SQA		WJEC		AP	IB
	Levels: S=AS 2=A2 H=Highers	S	2		S	2	S	2	S	2	S	2	H	AH	S	2		
Evolution, Classification and DNA	Evolution; Speciation; Species; Endemism; Gene pool; Allopatric; Sympatric; Isolation; Variation; Adaptive radiation; Adaptation; Wallace; Darwin		◆	◆		◆		◆	◆		◆		◆	◆		◆	◆	◆
	Classification; Taxonomy; Binomial system; Dichotomous Keys	◆		◆	◆			◆	◆	◆	◆		◆		◆			◆
Ecology and Ecosystems	Ecology; Habitat; Niche; Abiotic; Biotic		◆	◆	◆		◆		◆	◆	◆					◆	◆	◆
	Biome; Ecosystems; Rainforests; Desert; Coral reefs; Mangroves; Marine; Coasts; Hot arid; Semi-arid; Woodland Bush; Tropics; Tropical		◆	◆		◆	◆				◆					◆	◆	◆
	Populations; Competition; Interspecific; Intraspecific; Predator Prey; density dependent; independent; Symbiosis		◆	◆		◆	◆				◆					◆	◆	◆
	Succession; Climax community		◆			◆				◆	◆	◆				◆		◆
	Biodiversity	◆		◆	◆			◆	◆	◆	◆				◆		◆	◆
	Practical work; Field techniques; Ecological sampling; Random sampling; Transects; Capture, mark, release and recapture; Biodiversity indexes; Data handling and presentation; Quadrats; Statistical testing; Measuring; GIS; Research tools		◆	◆		◆				◆	◆	◆	◆	◆		◆	◆	◆
	Written reports; Research projects; Report; Case studies			◆					◆				◆	◆		◆	◆	◆
	Sustainability	◆		◆					◆	◆		◆				◆		
Agriculture, Human activities, Conservation and Sustainability	Agriculture; Agricultural impact; Agricultural exploitation; Cultivation crops; Food production; Sustainable agriculture; Sustainability; Forestry; Timber; Deforestation; Fisheries; Over fishing; Deforestation; Human management; Human effects; Human activities	◆				◆						◆	◆			◆	◆	
	Fair-Trade; Coffee; Rain Forest Alliance; Ecotourism; Tourism; Carbon trading; Greenhouse gas emission control (REDD+)															◆		
	Indicator species; Pollution; Climate change; Global warming; Carbon footprint; Fossil fuels		◆	◆		◆				◆	◆		◆				◆	◆
	International conservation; Endangered species; Invasive species; Biological control; Pests; CITES; Ethical, Local; Global	◆	◆	◆		◆		◆			◆	◆	◆			◆		◆
	National Parks; Wildlife reserves							◆										◆
	Environment; Environmental monitoring; Environmental impact; SSSI																	
	Animal behaviour; Primate Social behaviour; Courtship; Territory; Co-operative hunting; Herbivores; Grazing	◆		◆	◆			◆				◆	◆	◆		◆	◆	◆

Table: Highlighted in Black are topics that you might experience at your research site. Key: C = Cambridge. Pre-U, C.int = Camb. Int. CCEA = N.Ireland; Ed/Sal = Edexcel Salters, S= SQA ; Edex = EdExcel; IB = International Bacc; AP=Advanced Placement (v. 20/11/14)

Topic	Geography, APES and ESS	IB ESS	APE S	AQA		CCEA		Edex		OCR		WJEC	
				Geography									
	Levels: S=AS 2=A2			S	2	S	2	S	2	S	2	S	2
Evolution, Classification and DNA	Evolution; Speciation; Species; Endemism; Gene pool; Allopatric; Sympatric; Isolation; Variation; Adaptive radiation Adaptation; Wallace; Darwin												
	Classification; Taxonomy; Binomial system; Dichotomous Keys	◆											
Ecology and Ecosystems	Ecology; Habitat; Niche; Abiotic; Biotic	◆	◆							◆			
	Biome; Ecosystems; Rainforests; Deserts; Coral reefs; Mangroves; Marine; Coasts; Hot arid; Semi-arid; Woodland Bush; Tropics; Tropical	◆	◆	◆	◆		◆		◆	◆	◆	◆	◆
	Populations; Competition; Interspecific; Intraspecific; Predator Prey; density dependent; independent: Symbiosis	◆	◆										
	Succession; Climax community	◆											
	Biodiversity	◆	◆		◆				◆				
	Practical work; Field techniques; Ecological sampling; Random sampling; Transects; Capture, mark, release and recapture; Biodiversity indexes; Data handling and; presentation; Quadrats; Statistical testing; Measuring; GIS; Research tools	◆	◆		◆	◆		◆		◆	◆	◆	
	Written reports; Research projects; Report; Case studies	◆	◆		◆		◆	◆		◆	◆		
Agriculture, Human activities, Conservation and Sustainability	Sustainability	◆	◆		◆		◆			◆	◆		
	Agriculture; Agricultural impact; Agricultural exploitation; Cultivation crops; Food production; Sustainable agriculture; Sustainability; Forestry; Timber; Deforestation; Fisheries; Over fishing; Deforestation; Human management; Human effects; Human activities	◆	◆		◆		◆						
	Fair-Trade; Coffee; Rain Forest Alliance; Ecotourism; Tourism; Carbon trading; Greenhouse gas emission control (REDD+)						◆	◆		◆	◆		◆
	Indicator species; Pollution; Climate change; Global warming Carbon footprint; Fossil fuels	◆	◆				◆	◆		◆			
	International conservation; Endangered species; Invasive species; Biological control; Pests; CITES; Ethical, Local; Global	◆			◆					◆			
	National Parks; Wildlife reserves								◆				
	Environment; Environmental monitoring; Environmental impact; SSSI												
Behaviour	Animal behaviour; Primate Social behaviour; Courtship; Territory; Co-operative hunting; Herbivores; Grazing												

Table: Highlighted in Black are topics that you might experience at your research site. Key: C = Cambridge. Pre-U, C.int = Camb. Int. CCEA = N.Ireland; Ed/Sal = Edexcel Salters, S= SQA; Edex = Edexcel IB ESS = Env Systems and Societies; APES = Advanced Placement Env. Science (v. 20/11/14)

Reading and research questions

In the last few years, an increasing number of students joining our research programmes have taken this opportunity to undertake IRPs. These research projects take many different forms, but what they all have in common is the need to pose and answer a research question. Examples of these include Extended Project Qualification (EPQ), Extended Essay (EE) for IB, as well as many different projects specific to various education systems worldwide.

We can support a selection of different topics for either essay-based research projects or data-led research projects that are tailored towards what the students will experience on-site. It is a fantastic opportunity for a student to witness first-hand many of the aspects of their research question and, in many cases, they will have access to samples of past datasets for their project. Students may also have the opportunity to talk with the actual scientists involved which will give them a convincing 'slant' to how they answer their research question.

For success with IRPs, careful planning is needed by the student and a lot of the work will be done prior to their expedition. They will need close guidance from their school supervisor, and the scientists in the field need to be briefed so that support can be provided where they can. If you or your students are interested in undertaking a research project with us, you should contact schoolresearchprojects@opwall.com.

For more information visit the Opwall website: <https://www.opwall.com/schools/educational-benefits/independent-research-project/>.

Many of you will also have seen the Wallace Resource Library (WRL) which contains many datasets based on the research being carried out and it has been prepared by the actual Opwall scientists involved. It is a very valuable source of ideas with comprehensive datasets to look at and study.

Demo version – <http://wallaceresourcelibrary.com>

Do also make use of the research library on the OpWall website - <http://www.opwall.com>

How does it work?

Once you have an idea send an email to schoolresearchprojects@opwall.com with your initial ideas and contact details so that one of the academic staff working with Opwall can contact you to discuss possible research questions. We can also send you further information to help you choose a suitable title for your research site.

Once you have decided on a title you will then be asked to complete a registration form (supplied on request) which we can then forward to the appropriate country manager or scientist. This will then inform those at the research site about what you are hoping to achieve plus for us to give you as much assistance as we can.

In some cases, we will also be able to provide you with data sets from previous years which some students will find very useful.

Deadlines: Although each school will be operating their own schedule we would like registrations to be completed at least 3 months before their expedition begins although the earlier the better.

Do also make use of the research library on the Opwall website - <http://www.opwall.com>

Background

Akeroyd, J. R. & Page, N. (2006) The Saxon Villages of Southern Transylvania: Conserving Biodiversity in a Historic Landscape. In Gafta, D. & Akeroyd, J.[R.], Eds (2006) Nature Conservation: Concepts and Practice, pp. 199–210. Springer Verlag, Heidelberg, Germany.

Akeroyd, J. R. (2006) The Historic Countryside of the Saxon Villages of Southeast Transylvania – www.amazon.co.uk

Lonely Planet Guide to Romania - <http://shop.lonelyplanet.com>

Downloads from <http://www.fundatia-adept.org/?content=publications>

- A Taste of Transylvania
- Saschiz brochure
- Food and Culture tours
- Tarava Mare Walking brochure
- Nature200 in Romania
- Sighișoara-Târnava Mare Natura 2000
- ADEPT
- Village environmental projects

ID Guides

- LasloRakosy - Brief Guide to Butterflies and Moths of Sighisoara-Tarnava Mare Natura 2000 Site – order via ADEPT website
- James Roberts – Romania – a Bird Watching and Wildlife Guide – www.amazon.co.uk ISBN 0951351362

Research areas and activities being carried out in Transylvania:

- Farm surveys: plotting farm usage around villages linked with GIS technology.
- Farming changes in the Tarnava Mare region and how these are likely to impact biodiversity.
- Bird surveys: walking long transect sample routes that traverse the valleys on either side of the village. In the evening call-back surveys are also completed for corn crake and owls.
- Changes in bird communities in Tarnava Mare and habitat associations
- Butterfly communities as indicators of habitat changes in Tarnava Mare
- Plants surveys: The plant team will be focusing on target species that are good indicators of grassland types or have medicinal use
- Butterflies survey: 50m transects as the plant team, recording the butterflies encountered and using sweep nets to catch and identify the rarer species
- Large mammals: camera traps in key locations in the forests and on the valley transects in order to capture sightings of large mammals.

- Small Mammals: setting small mammal traps late at night which will be checked and emptied each morning.
- Bats late at night the team will set off from camp to deploy bat traps in key locations survey focuses on assessing population trends, species diversity, and the overall health of bat populations in the area
- Niche separation in small mammals and their use as indicators of habitat change.
- Distribution of abandoned land in the Tarnava Mare region.

Useful contacts/information

Fundatia ADEPT is a UK and Romanian registered charity which promotes agricultural development and environmental protection in the Tarnava Mare area of Transylvania in Romania.

Their primary objective is the conservation of one of Europe's last medieval landscapes through appropriate economic regeneration of the farming communities. ADEPT has been working since 2002 with farmers, local communities, universities, other NGOs, and government at all levels to solve the range of problems threatening the survival of this remarkable landscape and of the small-scale farming communities living within it.

Fundatia ADEPT is carrying out an integrated programme linking economic and social benefits with biodiversity conservation, and raising local capacity for good management in the future. They bring together Romanian and wider European expertise to carry out innovative nature conservation and rural development projects that are firmly rooted in local communities. Their website provides detailed information in English and Romanian, for local people and visitors who are interested in protecting this area, and similar High Nature Value landscapes in Romania and in Europe. <http://www.fundatia-adept.org/>

Operation Wallacea

Wallace House, Old Bolingbroke, Lincolnshire, PE23 4EX, England
Tel: +44 1790 763194. Fax: +44 1790 763825
e-mail: info@opwall.com

WizzAir.com

In the UK (0905 707 0000) Calls are charged at GBP 1.45 per minute and calls from mobile networks may be charged at a higher rate.

From Romania only: 0903 760200 Calls are charged at EUR 1.19 per minute and calls from mobile networks may be charged at a higher rate.