



THE ROSELAND CENTRE

**Field Studies & Residential Learning
Base**

St Just in Roseland, Cornwall Truro
TR2 5JA



THE
ROSELAND
CENTRE

THE ROSELAND CENTRE COASTAL FIELD STUDIES CENTRE



Located on the Roseland Peninsula within an Area of Outstanding Natural Beauty, the Centre offers exclusive-use residential facilities for schools and colleges facilitating access to field courses focusing on estuarine, intertidal and coastal ecosystems in the Fal Estuary system for:

- Natural History
- Marine Biology
- Ecology
- Environmental Science
- Geography
- Conservation Biology
- Coastal Management

WHY THE ROSELAND?



THE NATURAL HISTORY GCSE

- The new Natural History qualification will enable young people to explore the world by learning about organisms and environments, environmental and sustainability issues, and gain a deeper knowledge of the natural world around them.
- They will also develop the skills to help them carve a future career in the natural world if they wish to – for example observation, description, recording and analysis, through sustained and structured field study.



THE ROSELAND PENINSULA

The Centre is situated within one of Cornwall's most environmentally diverse coastal regions.

WHY THE ROSELAND CENTRE

A READY-MADE FIELD COURSE BASE

We offer a flexible, repeatable, and cost-effective residential field teaching base.

Key Benefits include:

- Residential capacity for up to 34 students
- Exclusive-use bookings
- Dedicated indoor teaching space
- Outdoor learning environments
- Immediate access to estuarine and coastal habitats
- Flexible catering or self-catering options
- Safe, managed residential setting



UNIQUE LEARNING ENVIRONMENT

Students can access multiple ecosystems within a short distance:



- Rocky shore environments
- Estuarine mudflats and saltmarsh
- Coastal woodland and grassland
- Fal Estuary system
- National Trust coastline
- AONB protected landscapes

FACILITIES

ACCOMMODATION

- Sleeps up to 34 guests in 5 bunk rooms
- Leader accommodation provided
- Accessible rooms and wet facilities
- Residential exclusive-use hire
- Drying room

TEACHING SPACES

- Indoor seminar/classroom space
- Dining hall suitable for teaching
- Outdoor learning areas
- Flexible group workshop space
- Wi-fi



LOGISTICS

CATERING

- Fully equipped kitchen
- Self-catering or catered options
- Group dining facilities

TRANSPORT & PARKING

- On-site parking available
- Limited coach parking (advance planning required)
- Suitable for minibus-based field courses

SAFETY & COMPLIANCE

- Full risk assessment systems in place
- Safeguarding policies and procedures
- Emergency response protocols
- Public liability insurance in place



FIELD COURSE MODULE SUPPORT



Geography Focus

- Beach profiles and sediment size
- Coastal erosion and management
- Tourism impacts
- Land use mapping
- Environmental quality surveys

Science Focus

- Species diversity across shore zones
- Adaptations of intertidal organisms
- Human aspects on biodiversity
- Abiotic factors affecting species distribution
- Quadrat and transect sampling

FIELD COURSE OPPORTUNITIES

The Roseland Centre supports a wide range of field based activities across marine, coastal and terrestrial systems.



Example Activity Areas

- Rocky shore ecology surveys
- Biodiversity monitoring
- Estuarine transects
- Coastal geomorphology studies
- Water quality sampling
- Conservation management assessments

Field methods include

- Quadrat and transect sampling
- Species identification and ecological recording
- Sediment and water sampling
- Habitat classification
- Environmental impact assessment

PARTNERSHIPS

FIELD COURSE PARTNERSHIPS



The Roseland Centre welcomes partnerships with:

- Schools, Colleges and Universities
- Field studies programmes
- Outdoor education departments
- Postgraduate teaching courses

We offer flexible, repeatable, and cost-effective residential field course delivery.

CONTACT



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St Just in Roseland
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Truro TR2 5JA

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We welcome informal discussions and pilot visits for
academic staff.

Appendix



Sample 3 day programme

**Why are some areas of
the shore more
biodiverse than others?**



SAMPLE 3-DAY FIELD COURSE

Geography and Science Field Course

The tidal creeks and mudflats around St Just in Roseland provide a range of habitats including sheltered mudflats, saltmarsh, estuarine channels and rocky shore features, making them ideal for studying how environmental conditions influence biodiversity.

DAY 1 Introduction and Site Familiarisation

DAY 2 Field Investigation

DAY 3 Analysis, Evaluation and Conclusions



Geography and Science Outcomes



Geography

- Collect primary fieldwork data.
- Use sampling techniques.
- Present and analyse geographical data.
- Understand coastal processes and management.
- Evaluate environmental quality and human impacts.
- Draw evidence-based conclusions.

Biology / Combined Science

- Use quadrats and transects effectively.
- Investigate biodiversity and ecosystems.
- Measure abiotic factors.
- Explain adaptation and species distribution.
- Analyse ecological data.
- Evaluate scientific methods and evidence.

Core Fieldwork Equipment required



- Quadrats
- Transect tapes (measuring tapes)
- Species identification sheets/guides
- Recording sheets / clipboards
- Pencils (and waterproof clipboards if possible)
- Smartphones or cameras
- Thermometers
- Rangefinders or metre sticks
- Soil / sediment testing kits

Sample Hypotheses



- Sheltered muddy shores support greater biodiversity than exposed shore areas.
- Areas with greater habitat complexity contain more species.
- Biodiversity decreases where human disturbance is greatest.
- Variations in salinity and substrate explain differences in species distribution.

Suggested enquiry starters

Students compare different shore levels, habitats (rock pools, exposed rocks, sandy areas), and environmental conditions, exploring and discussing factors that appear most influential or important based on their observations, encouraging explanation and evaluation rather than simply listing factors but finding answers to one of the following:



- Why are some parts of the shore more biodiverse than others?
- What has the biggest impact on biodiversity in the intertidal zone?
- How do living and non-living factors affect biodiversity on the shore?
- Why do different species live in different parts of the intertidal zone?
- How does the changing environment of the intertidal zone influence the organisms that live there?
- Which factors seem most important in determining where organisms are found on the shore?
- How do organisms adapt to survive in different parts of the intertidal zone?
- How might human activity affect biodiversity in the intertidal zone?

DAY 1 – Introduction and site familiarisation

Morning

10:00 – Welcome briefing, accommodation induction, health & safety

10:45 – Introduction to enquiry + key concepts

11:30 – Shoreline processes and biodiversity overview (teacher input)



Afternoon Field Session

13:30 – Walk to creek (20 min)

13:50 – Site: identify habitats and possible sampling locations

15:00 – Field skills: species ID + field sketching

16:00 – Return walk

16:30 – Method introduction: quadrats, transects, sampling planning

Evening

19:00 – Theory session: factors affecting biodiversity (abiotic + biotic + human)

20:00 – Hypotheses development + investigation planning (KS3–KS5 differentiation)

21:00 – End of day review

DAY 2 – Field investigation

Morning

09:00 – Walk to creek

09:20 – Quadrats along transects: biodiversity sampling (core data collection)

11:00 – Environmental measurements (e.g. substrate, salinity, moisture, exposure)

Afternoon

13:00 – Repeat sampling at contrasting shore sites

14:30 – Human impact observations + photographic evidence

15:00 – Return walk

15:30 – Data organisation and recording

Evening

19:00 – Data analysis workshop (graphs, patterns, biodiversity indices KS4/5)

20:30 – Interpretation of results and emerging conclusions

21:30 – End of day review



DAY 3 – Analysis, Evaluation and Conclusions

Morning

09:00 – Optional return to creek (fill gaps / additional evidence)

10:00 – Finalise data analysis (graphs, comparisons, biodiversity calculations)

11:00 – Group presentations: findings and explanation of spatial variation in biodiversity

12:00 – Evaluation of methods (reliability, accuracy, limitations, improvements)

Afternoon

13:15 – Plenary: linking results to estuarine ecosystems and conservation

14:00 – Departure



Differentiation by Key Stage

KS3

- Species counts and simple abundance scales.
- Habitat comparisons.
- Bar charts and conclusions.

KS4

- Systematic sampling.
- Simpson's Diversity Index.
- Statistical comparison between sites.
- Evaluation of reliability.

Post-16

- Biodiversity indices and significance testing.
- Analysis of abiotic controls (salinity, sediment, exposure).
- Consideration of ecological & estuarine processes.
- Critical evaluation of methodology and conservation implications.



Fieldwork Skills Progression

KS3 – Foundation Skills

Students have the opportunity to:

- Use simple fieldwork methods (e.g. quadrats, species counts)
- Identify basic plants and animals in coastal habitats
- Record results in tables or tally charts
- Describe differences in biodiversity between locations
- Present results using simple graphs
- Give basic conclusions using evidence



Fieldwork Skills Progression

KS4 – Developing Skills

Students have the opportunity to

- Use systematic sampling (quadrats and transects) accurately
- Collect and record reliable primary data
- Compare species distribution across different shore environments
- Present data using appropriate graphs and maps
- Use basic statistical techniques (e.g. averages, biodiversity indices)
- Explain patterns using geographical processes
- Draw clear conclusions linked to evidence



Fieldwork Skills Progression

Post-16

Students have the opportunity to:

- Design and justify independent sampling strategies
- Collect high-quality, detailed environmental datasets
- Apply advanced statistical analysis (e.g. significance, biodiversity indices in depth)
- Interpret complex relationships between abiotic and biotic factors
- Evaluate validity, reliability, and limitations of fieldwork methods in detail
- Produce well-argued, evidence-based geographical conclusions
- Communicate findings using precise geographical terminology and structured analysis



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