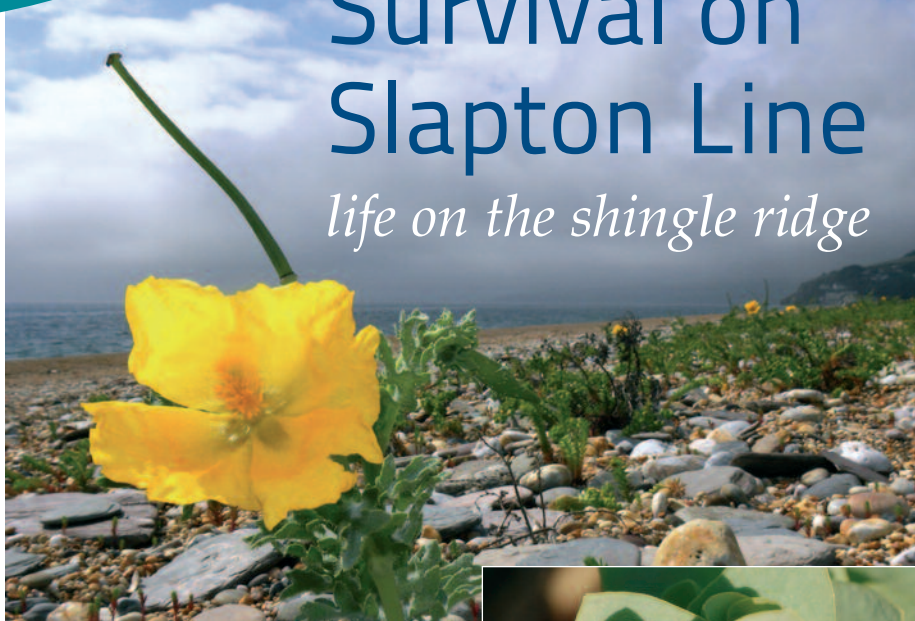


## Survival on Slapton Line

*life on the shingle ridge*

Yellow-horned Poppy • Photos: Brenda Child



**A**fter the severe winter weather that has left many of us sadly shaking our heads over garden plants that are no more, spare a thought for the wildflowers of Slapton Line. They also have to contend with the damaging effects of high tides and salt spray.

How do they do this? If you tried growing garden plants on the beach, you'd have a problem finding any soil or organic matter in which to sink plant roots. Yet Slapton's shingle ridge provides unique conditions in which specialist plants survive.

Yellow-horned Poppies are adapted to the harsh environment, with waxy leaves covered in dense hairs to limit water loss. They produce very long seed pods, up to 30cm long, which fling hundreds of tiny seeds across the shingle when the pods ripen. Many are wasted, but some will grow into new plants.

Sea Spurge is so common on Slapton Line that most people pass it without a second glance. However, take a closer look and you'll see how intricate the flower is. Its green flowers are pollinated by flies that visit to feed on the nectar produced from tiny yellow crescent-shaped nectaries. Incredibly, the plant can grow a tap root which grows down over a metre into the shingle. After spring storms, the whole plant can be flung across the shingle and looks as



*Sea Spurge: the female flower in the centre is surrounded by tiny cup-shaped male flowers, called 'cyathia'.*



*Painted Lady feeding on the nectar from Sea Kale*

though it will never survive. Within a month, it has come back to life, with the help of this special root system.

In May 2009, a huge influx of Painted Lady butterflies flew in from the continent, in search of food. They arrived just as the Sea Kale was in flower, providing the nectar that the butterflies sought. Yet another survival mechanism – hundreds of flowers, producing hundreds of seeds.

With such a variety of plants on our doorstep, it's an inspiration for your garden!

## Giving plants a helping hand

The vegetated shingle ridge is one of the most important yet fragile features of the SSSI designation at Slapton Ley. And while the geomorphology of the barrier beach is itself unique to Slapton, it is the rare plants that this habitat supports that makes it so significant.

Trampling has had a devastating effect on certain sections of the beach, leaving some areas without any vegetation. You only have to look at the well established trial plots, south of the Memorial car park, to see how good the plant cover on the ridge could be with just a little care and control.

Not surprisingly, the areas adjacent to the car parks are the worst affected, but while the solution to the problem is obvious – to try reduce trampling by managing the 'traffic flow' – it is easier said than done!

People come to Slapton to enjoy the scenery of the coastline. Visitors are encouraged to cross the road and to use the footpath to Torcross, but many want to walk along the ridge and enjoy the view. By giving a 'sacrificial strip' to walkers the surrounding areas can be left to regenerate, enabling the plants that make the ridge so attractive, and special, to flourish.

To this end the fence at the top of the beach has been extended, discouraging people from walking on the sensitive areas. Happily, there are already improvements in the ground cover – a sight that we can all enjoy!



*Sea Holly – in sharp decline*

# Tackling Slapton's coastline

Every year Torcross-based EnduranceLife organises the Coastal Trail Series – a series of running events with routes taking in the stunning scenery and challenging terrain along the British coastline. In February the South Devon Stage was in our area, with competitors crossing part of the Nature Reserve on their marathon run. This is a popular event providing a picturesque but punishing course!

Due to the importance of the Reserve we worked closely with the organiser, Gary Jolliffe, to create a route that would enable

competitors to enjoy the challenge of the local terrain, without undue impact on the reserve. Sensitive areas of the Reserve were avoided, with the fragile shingle ridge a definite no-go area, and the number of competitors was limited – as less feet equals less impact. But it was still reassuring to know that in that in the event of damage to the trails, the EnduranceLife team were fully committed to undertake any necessary repairs.

Additionally, after the event we welcomed a volunteer work party organised by EnduranceLife. They helped with footpath improvements and other conservation tasks on the Reserve.

Himalayan Balsam



Himalayan Balsam is highly invasive. It spreads quickly and grows in dense clumps and with its great height it quickly smothers our native wild flowers. So any British wildflowers cannot compete and are wiped out. The Himalayan Balsam takes over and creates a monoculture devastating the biodiversity.

The River Gara feeds the Ley with water and is now also bringing Himalayan Balsam into the Nature Reserve. Large areas of Himalayan Balsam have been seen in the reedbeds in the Higher Ley at the entrance to the Ley and we want to stop it spreading throughout this Site of Special Scientific Interest.

If you see it before it flowers in early Summer then you can pull it up very easily and put it in a bag to stop the seeds scattering. If you see it in flower in mid Summer we would like you to report its location to the NNR team to help us map its spread.



## Beware the pink pest!

**N**ormally the discovery of a new species in the reserve would be a cause for celebration. However, that was not the case when Himalayan Balsam (*Impatiens glandulifera*) was discovered growing in the Higher Ley last year. Although the pink swathes of flowering Himalayan Balsam can make a dramatic sight, as the tall clumps of pink flowers both look and smell attractive, it can be a death-knell for the native flowering plants.

Himalayan Balsam it is one of the tallest annuals in the UK, reaching two metres in height. It favours wet places and is usually seen lining the banks of water courses. One plant can produce about 800 seeds; with the slightest disturbance the seed capsules explosively scatter seeds up to seven meters away. Seeds are also carried downstream in the water spreading them along the riverbanks throughout the catchment area (see right).

Leaves with finely serrated edges, up to 15cm long. Mid-rib may be reddish

Seed pods up to 2.5cm long, hanging off red stalks

Characteristics of Himalayan Balsam

Stem hollow, sappy and brittle. Coloured green to red in spring turning to pink to red in summer

Pink trumpet-shaped flowers



# Autumn bird visitors

**The Autumn of 2010 proved to be a bumper year for our licenced bird ringers, with the number of birds trapped and ringed being one of the highest in the last 50 years.**

The biggest surprise of the year was a Great Reed Warbler, which turned up on the 25th September, a species more usually seen or heard in Spring rather than Autumn. This large version of a Reed Warbler breeds across Europe but is rarely seen on this side of the channel. It has been recorded 11 times in Devon, the first being at Slapton in 1961.

Barn Swallows seem to favour the new reed beds at Thurlestone Marsh, and are not roosting at Slapton in great numbers. However, the group did manage to ring passage birds by drawing them in with tape lures along with a hybrid Swallow/House Martin – a real odd ball mix of the two

species! It's interesting to muse whether it will follow other swallows to South Africa to spend the winter or join large flocks of House Martin in winter grounds south of the Sahara.

The information gathered from the ringing is used by British Trust for Ornithology to monitor UK bird population trends. Long distance migrants such as Pied Flycatcher and Tree Pipit have been faring badly in recent years while Blackcap and Chiffchaff, two short distance migrants, are actually increasing in numbers – trends reflected in the Slapton totals.

The ringing activities on the reserve are supported by Slapton Ley Field Centre and Whitley Wildlife Conservation Trust, and for those wanting to find out more there are courses and demonstrations held throughout the year.

## Research update

**The Research Seminar provides an opportunity to share current research with both the academic and local community. In total, this February event was attended by about 70 people.**

Highlights from this year included Dr Henry Schofield reporting on the work of the Vincent Trust. This small charity has successfully trebled the number of rare Greater horseshoe bats at Gara Bridge, near Morleigh. This has been achieved by buying old barns and buildings, then developing them as nature reserves for bats.

Professor Paul Hart, studying the voluntary ban on trawling in Start Bay, has shown that this has not only reduced

the conflicts between fishing trawlers and crab potters but has also increased biodiversity of marine life, particularly sea urchins and bivalves. This work has supported legislation for Marine Protection Areas in Start Bay and around Britain.

Scientists from Sheffield University are using chemical analysis to tell apart two very closely related red ants. Only one of these ants is essential to the lifecycle of the Large Blue butterfly. This analysis will help us to reintroduce the rare Large Blue butterfly to Slapton Ley.

Research on Slapton Line continues with Professor Gerd Masselink's investigation of water flows. Seawater flows into the shingle with high tides and waves, however the overwhelming flow of water is from the freshwater Ley behind and saltwater does not permeate into the Ley.

Professor Tim Burt and Dr Nicholas Howden demonstrated how the knowledge acquired from research into the rivers feeding Slapton Ley have inspired the study of other river catchments across Britain. It is impressive that the research completed at Slapton Ley improves our understanding of the environment and contributes to science and conservation.

If you would like to attend the event next year, contact Andy Pratt at the Centre.

Greater horseshoe bat



## Voluntary drivers

**W**e have an pool of volunteers we call upon to drive students and tutors to various destinations around Devon, travelling in the Field Centre mini-buses. However, we are looking to add to that list of volunteers, we can never have too many!

### What's involved?

- Sometimes a full day, sometimes only a matter of hours.
- We would ring you in advance and ask if you would be happy to drive. If the date doesn't suit, we just go to the next on the list.
- You don't need a PSV Licence.



One of our drivers, Colin Hunter, said: "it's a great way of being involved in your local community. You go to places you've never heard of, learn a lot about the environment and meet interesting young people. You might even get a round of applause for good driving!"

If you are interested, please contact Jayne or Julie on 01548 580466.

Congratulations to Isabel Brinsden on representing England at a cross-country event in Belgium. Isabel is currently working at Slapton Ley Field Centre during a 'gap' year before university.



## SPRING and SUMMER events

Explore Slapton and learn new skills with our exciting range of **free** events. Booking is essential.

### Ancient Woodland Walk

**Saturday 16 April, 10am–12.30pm**

A guided walk through the sanctuary areas of Slapton Ley NNR. Discover the rich history and wildlife of the area, and enjoy the smells, sights and sounds of a woodland coming alive in early Spring • **Meet at Slapton Ley Field Centre** • Tea, coffee and cakes available on arrival (recommended donation of £2.50)

### Dawn Chorus

**Saturday 30 April, 6am–8.30am**

A quiet morning stroll around Slapton Ley, listening to the songs of our feathered friends as they wake to (hopefully!) a tranquil Spring dawn. Optional breakfast of wholesome, local food • **Meet at Slapton Ley Field Centre** • Optional breakfast provided at £6 per person • Binoculars useful but not essential

### Spring Birds at Slapton Ley

**Monday 2, Saturday 14 and Saturday 21 May, 9.45am-12 noon approx**

A stroll around the nature reserve with Professor Ian Mercer, President of the Field Studies Council • **Meet at Slapton Ley Field Centre** • Binoculars useful but not essential • Optional lunch of wholesome, local food provided at £6 per person

### Badger Watch

**Tuesday 31 May, Thursday 2 June and every Tuesday and Thursday from 26 July–1 September**

A rare opportunity to see these fascinating animals in their natural environment • **Meet at Slapton Bridge** • Warm, soft, 'quiet' clothing (not scratchy waterproofs) • A torch and insect repellent are advisable

### Bat Watch

**Wednesday 1 June and every Wednesday from 27 July–31 August**

Watch these magical creatures as they emerge from their roosts and follow their foraging routes, using our bat detectors to hear their weird and wonderful calls • **Meet at Slapton Ley Field Centre** • A torch and insect repellent are advisable

### Dormouse Survey

**Thursday 28 July and 18 August, 10am–12 noon**

Join us as we conduct Dormouse surveys around the reserve. Learn about and hopefully catch a glimpse of this rare and elusive mammal • **Meet at Slapton Ley Field Centre** • Optional lunch – £6

### Bird in the Hand

**Saturday 30 July, 8.00am–10am**

A chance to view the bird-ringing operation by the Devon Bird Watching & Preservation Society. An optional brunch will be followed by a walk around the Higher Ley to observe some birds and try out your field ID skills • **Meet at Slapton Ley Field Centre** • Optional brunch provided at £6 per person • Binoculars useful but not essential

### Bushcraft

**Wednesday 3, 10 and 17 August, 10am–12 noon**

Test your survival skills in the woods around Slapton Ley, then join us for a woodland barbeque • **Meet at Slapton Ley Field Centre** • Optional barbeque at £6 per person

### Celebrate Start Bay

**Saturday August 21, 10am–4pm**

A showcase of local arts and crafts, food and the great outdoors! Stalls in the village hall full of information and shopping opportunities. Outdoor and indoor activities and entertainment, talks and workshops • **Contact Slapton Ley Field Centre for more details**

### Beach Activities

**Weekends in July and Saturday to Thursday during the school summer holiday, 12 noon–4pm**

Join the fun at our beach trailer at Slapton Sands! • Souvenirs, ID guides and treasure trail maps will be available for purchase. Activities will be held daily including:

#### Pond Dipping Wednesdays, 2pm

Discover what lives under the surface. We may also see fish in the shallows and dragonflies fiercely darting around us • Wellies would be helpful but can be hired with prior notice

#### Working with Nature Thursdays, 2pm

Join us to learn about the wildlife of Slapton Ley, build homes for bugs and birds and discover ideas to encourage wildlife into your garden.

To book please contact the reserve office: **01548 580685** or **01548 580466**  
Email [reserve.sl@field-studies-council.org](mailto:reserve.sl@field-studies-council.org)

Sorry, no dogs. Children under 16 must be accompanied by an adult. Sensible outdoor clothing and footwear are recommended, as are insect repellent and torches for evening activities.

Slapton Ley National Nature Reserve (NNR) is owned by Whitley Wildlife Conservation Trust and managed by the Field Studies Council's (FSC) Slapton Ley Field Centre.

Head of Centre: Andy Pratt.

Reserve Manager: Nick Binnie.



**SLAPTON LEY**  
FIELD CENTRE & NATIONAL NATURE RESERVE

in partnership with:

