

Stream Lines



News from the Dorset Winterbournes Project

Spring 2009



Find out about managing your section of a winterbourne stream, new walking route, how to help survey wildlife and more...

What is the Dorset Winterbournes Project?

The Dorset Winterbournes Project aims to conserve and enhance the natural and cultural heritage of Dorset's winterbourne streams, which are a globally rare habitat.

Winterbourne streams are mostly fed by ground water held in the chalk rather than surface water. The water bubbles up in springs which feed the streams. As the water table drops during the summer, the springs dry up and the streams gradually stop flowing. Only when winter rainfall recharges the groundwater supplies will the streams flow again - which is why they are known as "winterbournes". Because the water has been filtered through the chalk, it is crystal clear and stays at a fairly constant temperature, making it an ideal home for wildlife.

The Winterbournes Project is focusing on two streams and their valley landscapes. The first is the River Winterborne which flows from Winterborne Houghton to Sturminster Marshall and the second is the South Winterborne which flows from Winterborne Abbas to West Stafford.

The Project has been running since February 2005 and was first piloted in the River Winterborne area. Funding and delivery of the overall project has been co-ordinated by the Dorset Area of Outstanding Natural Beauty (AONB) team. Other partners involved include: Environment Agency, Natural England, Wessex Water, Dorset Wildlife Trust, Farming and Wildlife Advisory Group, Dorset Countryside Service, Dorset County Council's Historic Environment Team and North Dorset District Council.

Visit www.dorsetaonb.org.uk or call 01929 557337 for further details about the project.

Managing your section of a winterbourne stream

The ecological value of a winterbourne stream relies on responsible water use and good management by landowners and gardeners.

Soil or pollution from nutrients contained in soil running into the stream is a risk to most watercourses and should be considered when planning crop management or mowing grass next to the stream. On chalk soils, pesticides and nutrients can easily get into the ground water through the free-draining soils.

These risks can be minimised through good practice management for any type of land adjoining a winterbourne stream, be it a farm or a garden. One option could be to consider using natural alternatives to pesticides and other harmful pollutants.

For more advice pick up a copy of the 'Managing the North Winterborne' leaflet (can also be used for the management of any winterbourne stream) from the Blandford Tourist Information Centre, North Dorset District Council offices or by calling the Dorset AONB Team on 01305 756782. The leaflet is also available to download from the Dorset AONB website under the 'Our Work' pages.

Managing the North Winterborne

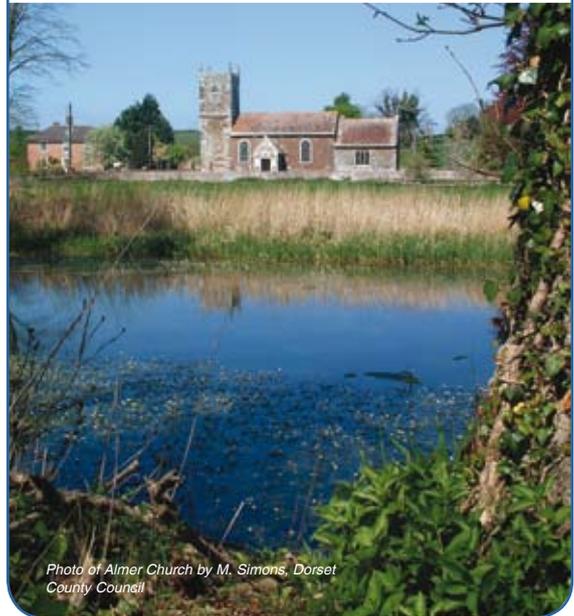


Photo of Almer Church by M. Simons, Dorset County Council

The Nine Stones at Winterbourne Abbas

One of the most interesting archaeological sites in Dorset is The Nine Stones which lies close to the South Winterborne River at Winterbourne Abbas. It is a small oval stone circle built over 4000 years ago. The sarsen stones are of differing heights, probably chosen deliberately for some symbolic value. Its location in a valley bottom, beside a winterbourne is unusual, stone circles such as the ones nearby at Kingston Russell and Hampton are more likely to be found on a hilltop.

Some stories suggest that it was moved here from another location. Circles vary in diameter, size, the number of stones and even shape. Some researchers believe that the stones in the circles were used for astronomical purposes, aligning with the rising and setting sun at significant times of the year, or with the course of the moon. It would seem that one of their roles was as a ritual and meeting place to mark important times in the agricultural year.

In local folklore the stones are also known as the Devil's Nine Stones – representing the Devil, his wife and family. There are also tales of local children who were turned to stone after playing the game five stones on a Sunday and stones that 'dance at 3.00pm on certain days'.



The Nine Stones

The circle is looked after by English Heritage and is situated alongside the busy A35. Until now access has only been possible from the road with parking in a small lay-by opposite. Now, with the assistance of several partners including the landowner and Little Chef, we are able to offer a safer route from the Little Chef Restaurant by way of a permissive path through a field. **The route will be opened in the spring and a new gateway has been sponsored by the Dorset AONB Sustainable Development Fund.**

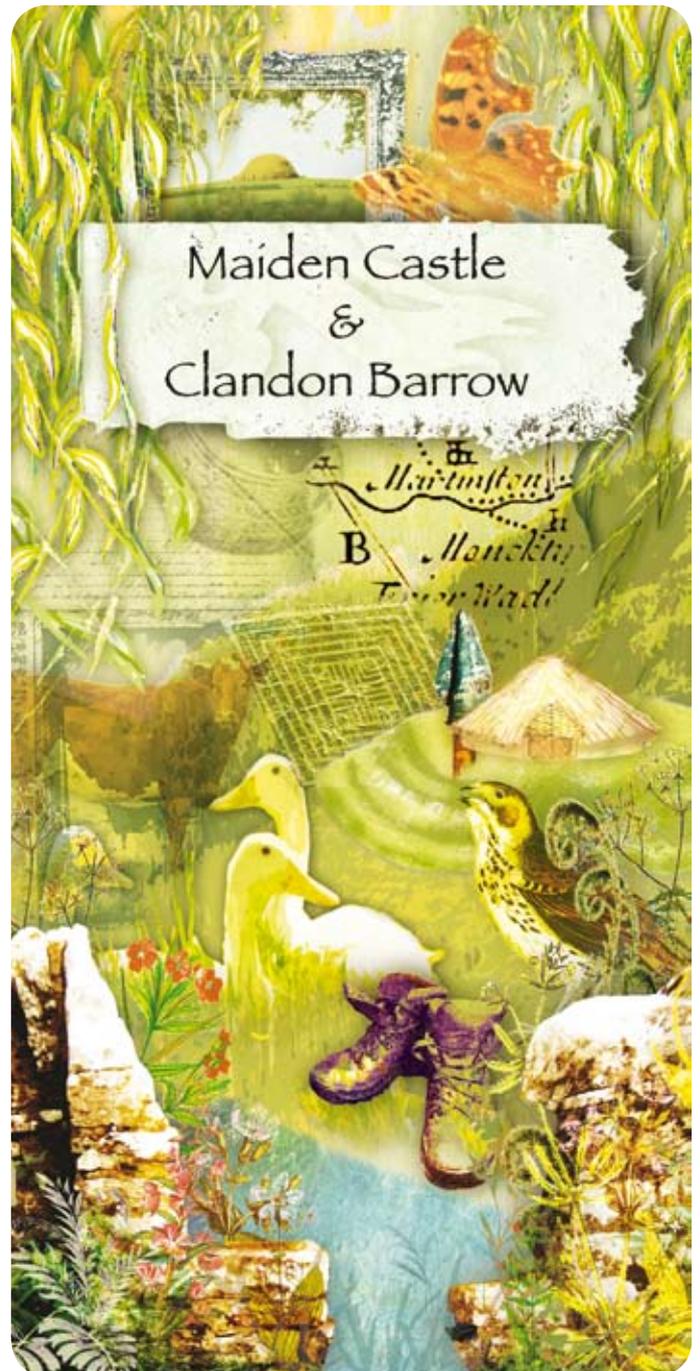
Round-a-bout the Ridge

May sees the launch of four circular walks around the South Dorset Ridgeway from the Dorset Area of Outstanding Natural Beauty Partnership. The walks take in the marvellous archaeology and natural scenery that makes this part of south Dorset a very special place to explore.

The walks have been developed as part of the South Dorset Ridgeway Heritage Project and make use of the rights of way network. They start and finish in one of the charming ridgeway villages where there are public transport links and opportunities for a welcome rest stop. Artist Yvonne Lee was commissioned to create a leaflet and map describing each walk.

The South Dorset Ridgeway can be found between Weymouth and Dorchester and runs east to west from Osmington Mills to Abbotsbury. It has been important to local people for millennia as shown by the extraordinary number of lumps and bumps - or historic monuments - that can still be found along its ridge. From long and bank barrows constructed around 6,000 years ago in the Neolithic period, stone circles and 4,000 year old Bronze Age round barrows, to Iron Age hillforts, the area rivals the more well known sites of Stonehenge and Avebury.

Two of the walks start in Winterborne St Martin, which is also known as Martinstown and pass by the South Winterborne. The shortest of these at 3 miles is Maiden Castle and Clandon Barrow. Starting at Martinstown's beautiful village church it follows a route through farmland to Maiden Castle, one of Europe's largest Iron Age hill forts. The second walk is Ridgeway Barrows a more strenuous 5½ mile walk. The path climbs up to the Ridgeway before joining the South West Coast Path National Trail through Bronkham Hill Bronze Age barrow cemetery before returning to the village down sunken paths and a deserted medieval village.

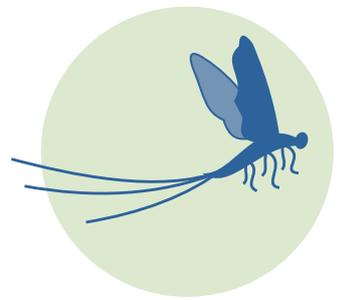


Leaflet designed by Yvonne Lee

For more information about the walks and copies of the leaflets contact Sarah Harbige, South Dorset Ridgeway Heritage Project Officer (Tel 07500 078351) or download from www.dorsetaonb.org.uk.

You can also pick up the 'Walking the North Winterborne' leaflet which contains four walks between Winterborne Houghton and Winterborne Zelston from the Dorchester or Blandford Tourist Information Centres, North Dorset District Council offices or by calling the Dorset AONB Team on 01305 756782. The leaflet is also available to download from the Dorset AONB website under the 'Our Work' pages.





Little egret

Winterbourne Wildlife

During 2008, the project team launched a wildlife survey card so that local residents can keep a record of the number, variety and location of wildlife which they see along the winterbourne streams. The survey card includes photos of the winterbourne wildlife and a map for you to mark on their location – it is a great way for children and adults to find out more about their local wildlife.



Kingfisher

The results are to be sent back to the project team to be collated and passed onto the Dorset Environmental Records Centre. The results will hopefully show if wildlife travels along the streams or stays in one place, and where the biggest or smallest populations of certain species are found. They will also show where there are undesirable species such as Himalayan balsam or mink which invade and destroy the native wildlife: see the opposite page for photo and description of mink to help distinguish between other similar mammals.



Great crested newt

The results received so far include sightings of water vole, kingfisher, little egret, mayfly, frogs, water crowfoot and Himalayan balsam.



Frog

If you would like to get involved in recording the wildlife which visits your garden or you see while out walking, please pick up a survey card from the Blandford Tourist Information Centre, North Dorset District Council offices or by calling the Dorset AONB Team on 01305 756782. The survey card is also available to download from the Dorset AONB website under the 'Our Work' pages.



Brown Trout

 <p>Water vole Unlike rats, these have furry tails & blunt noses</p>	 <p>Kingfisher Possibly Britain's most colourful bird</p>	 <p>Little Egret A recent arrival to S.England, they look like small white herons</p>	 <p>Brown Trout Look for the spotted flanks. They love clean water</p>	 <p>Mayfly These are identifiable by their three tails</p>
 <p>Newts Likely to be in ponds rather than rivers, they are 7-15cm long</p>	 <p>Frogs Look out for frogspawn and tadpoles in the spring</p>	 <p>Water Crowfoot This white-flowered plant lives in the water</p>	<p>These non-natives harm winterbourne wildlife</p>  <p>Himalayan Balsam Pink, sweet-smelling flowers. Seed pods 'pop' when ripe</p>  <p>Mink Size of large ferrets. Normally dark brown, the fur colour can vary</p>	

Please mark on these maps roughly where you saw the wildlife...



The Winterbournes Project aims to conserve and enhance the beauty, wildlife and history associated with these rare streams. For more information visit www.dorsetaonb.org.uk



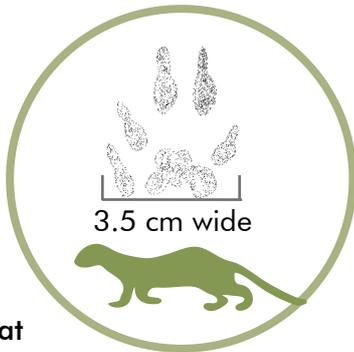
Q: What's the difference between a weasel and a stoat?

A: A weasel is weasily recognised but a stoat is stoatally different.

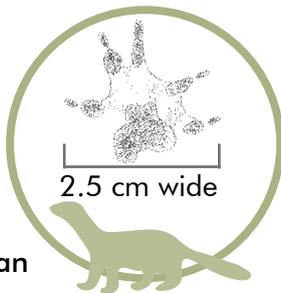
Have you ever seen something which looks like a weasel but at second glance seems to be something else? Then you might have seen one of its close relatives. There are a number of mammals (all belonging to the Mustelidae family) which at a distance can all look quite similar:



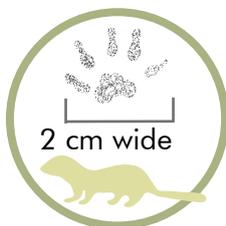
Otter



Polecat



American mink



Stoat



Weasel

The **European otter** (*Lutra lutra*) has five nailed toes which are webbed like a duck to make it a powerful swimmer. It has thick fur made up of two layers to provide waterproofing but also warmth, and can stay under water for three or four minutes. Otters can grow up to 125cm in length.



Otter

The **European polecat** (*Mustela putorius*) is dark brown with a lighter bandit-like mask across the face and pale yellow underbody fur. They grow to 62cm in length, are mainly nocturnal and usually found in woodland, farmland and wetland. The polecat was trapped to near extinction in the late 19th century but has now re-established itself in Dorset.



Polecat

American mink (*Mustela vison*) were introduced to Britain in the early 1900's to be bred on fur farms, however they soon escaped into the countryside and are now widespread over mainland Britain. They can be mistaken for otters, especially when their fur is wet, however mink are much smaller than otters (up to 54cm) and have bushy tails.



American mink

The **stoat** (*Mustela erminea*) is sometimes confused with the weasel, however is the larger of the two, growing up to 42cm. It has a chestnut-brown back and white fur on the underside, with a distinct dividing line between the two colours. It also has a black tip to its tail.



Stoat

The **weasel** (*Mustela nivalis*) has the same colouring as the stoat, but instead of a straight dividing line between the two colours has an uneven margin which is different in every individual. Weasels can grow up to 29cm.



Weasel

The Dorset Wildlife Trust is currently collecting details of mammal sightings to put together a Dorset Mammal Atlas. If you have seen any of the above or any other mammals, please record your sightings on a Dorset Mammal Recording Form, available from the Trust website www.dorsetwildlife.co.uk/dorset_mammals_project.html or directly from Anna Muckle (amuckle@dorsetwildlife.co.uk or tel: 01305 264620). Some mammal ID training workshops will be available from spring 2009; please check the Trust website for details.

Flowing Into the Future



River Frome

Dorset winterbourne streams were brought to the attention of a variety of national organisations during a conference at the beginning of March.

The main focus of the conference was Dorset's chalk streams (including winterbournes) and speakers from the Environment Agency, Wessex Water, Wild Trout Trust, Lincolnshire Wolds Chalk Stream Project and Dorset Wildlife Trust gave the audience a quick run-down of the history of chalk streams, the wildlife which lives in them and why the streams are so important to Dorset's landscape and biodiversity.

The conference included workshops where the audience took part in discussions on a variety of topics including chalk stream flies, involving local communities, understanding and managing the historic environment, climate change, and tackling invasive species.

The workshop discussions provided a list of actions at a local and national level which the various organisations which work on Dorset's chalk streams can look to take forward. If there is enough support, a Dorset Chalk Streams Project will be created.

Volunteers Help to Halt Himalayan Balsam



Himalayan balsam is a garden escapee which rapidly colonises river banks. It is an annual plant which grows to over 2 metres high in just one summer and has white to pink sweet-scented flowers between June and September. The mature seed pods explode when touched, sending the seeds up to 7 metres away from the plant - often the seeds land in the river and travel downstream to colonise a new stretch of river bank.

If left to grow, the plant can become so dense that grasses and other native plants are shaded out and subsequently die. This leaves the river banks bare in autumn/winter and prone to erosion from the higher river flows.

Eleven volunteers took to the River Winterborne in May last year to hand pull the Himalayan balsam from the stream. Ten large sacks were filled with the invasive plant from Winterborne Stickland alone; the plants were then taken to be composted.

Controlling Himalayan balsam can be **easy**, but time consuming. It can be controlled in a number of ways including by hand or by grazing. To find out more, contact the Environment Agency for the leaflet: **Guidance for the control of non-native invasive weeds in or near fresh water** on 08708 506506 or visit their publications catalogue website: <http://publications.environment-agency.gov.uk>

If a winterbourne stream runs through your garden or property and Himalayan balsam is present, please hand pull this plant over the summer and compost or burn it.



Volunteers and Himalayan balsam

Investigating Invertebrates



The River Winterborne



Paraleptophlebia weneri
(May fly larva)



Paraleptophlebia weneri
(May fly)



The South Winterborne River

Winterbourne streams have a regular, annual pattern of alternating dry and flowing periods. These flow patterns create extreme environments for invertebrates and as a result only a few specialist species can thrive. Some invertebrates which are likely to be found in winterbourne streams include the larvae of caddisflies, mayflies, stoneflies and crustaceans including the freshwater shrimp and water hoglouse.

One species which can survive these extreme environments is a rare mayfly called *Paraleptophlebia weneri* which hatches into larvae when the winterbourne begins to flow. They grow into adults and forage as terrestrial flies before the winterbourne dries up. The adults then mate and lay drought resistant eggs in the dry river bed that can survive until the winterbourne flows again.

Other species found in winterbourne streams are adapted to living in damp and semi-aquatic habitats. Examples of such invertebrates include the diving beetle *Agabus biguttatus*, which inhabits gravel beds in streams, especially winterbournes. The adults of these beetles retreat into the gravel in summer when the winterbourne stops flowing.

Studies have been carried out on the River Winterborne and South Winterborne River over the past few years and both winterbourne streams have supported rare invertebrates including the mayfly *Paraleptophlebia weneri*.

As winterbournes are dry for part of the year, they are often referred to as 'forgotten watercourses'. They do however, provide important habitat for a range of rare and specialist invertebrates.

For more information on invertebrate life in freshwater habitats please contact Amy Beard at the Environment Agency on 01258 483411.

Field wanted!

Dorset County Council's historic environment team would like to organise a short archaeological field walking event for local residents later this year. We are looking for a ploughed field that people can walk over for a morning, looking for worked flint tools and other evidence of past life in the River Winterborne valley.

If you have a field that you think might be suitable and would like more information, please contact Claire Pinder, Senior Archaeologist on 01305 224921 or c.j.pinder@dorsetcc.gov.uk.

Volunteers wanted too! If you don't have a field but have read this and would like to participate in this or other fieldwork being organised in the River Winterborne valley, please get in touch. We won't be able to give you dates or places just yet, but we'd be happy to put your name on the list for further information in due course.

What's on near you



Water vole

16th May, 10.00am. Historic building recording. Dorset County Council's historic environment team will be running a workshop on basic building recording in the River Winterborne valley. The day will be split between indoors and outdoors. Venue: to be confirmed. Contact Claire Pinder on 01305 224921.

13th June, 10.00am – 3.00pm. Water vole survey training at Martinstown Village Hall. Find out about water vole ecology, conservation and field signs. The day will be split between indoors and outdoors. Contact Rachel Janes at the Dorset Wildlife Trust for detail on 01305 264620. Free to residents living in the South Winterborne area. £20 charge for others.



Water crowfoot

14th to 21st June. 10.30am. Guided walks along the River Winterborne. Accompany members of Dorset County Council's historic environment team on a series of informal walks to explore the River Winterborne following the four routes of the project's Walking The North Winterborne leaflet; each route will be walked twice, over a period of eight days. All walks will start at the suggested starting point given in the walks leaflet - see page 3 for details of where to get a copy of the leaflet. Contact Claire Pinder on 01305 224921 or c.j.pinder@dorsetcc.gov.uk.

5th August, 2.00pm – 3.30pm. Dorset Archaeological Days 2009: Three Churches of the Winterborne Valley. A car tour (in own cars) with little walking involved. Meet at St Mary's Church Winterborne Whitchurch. Adults £5 (or £3 if ticket bought in advance), children £1. For more information contact Claire Pinder or Gordon Le Pard on 01305 224921.

Autumn 2009 - Winterbourne Plant Life. Look out for further promotion of this event or contact the Environment Agency for details nearer the time, on 01258 483441.

What's next

Over the next year, the Project plans to:

- Restore part of the South Winterborne River following wildlife surveys and pending grant approval from a SITA Enriching Nature funding bid.
- Produce a management advice leaflet for all of Dorset's chalk streams.
- Run more community events to keep you involved and informed – let us know if there are particular events you would like us to run.

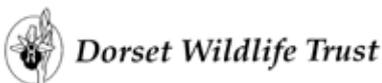


Photo credits: Dorset AONB, Purbeck District Council, Yvonne Lee, Environment Agency, Ian Cross, David Bevan, Lisa Vanovitch, Graham Taylor, Mike Hammet (Wildlife Photo Library UK) and Graham Case.

Mammal footprints re-drawn from 'Mammals of Britain: Their Tracks, Trails and Signs' by M. J. Lawrence and R. W. Brown. Mammal outlines re-drawn from 'Animal Tracks and Signs' by P. Bang and P. Dahlstrom.

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All leaflets can be made available in audio tape, large print and Braille, or alternative languages on request. Please call 01305 756782 for further information.