DRiPS
DARENT RIVER PRESERVATION SOCIETY

The voice of the River Darent

www.darent-drips.org.uk

No 40 Autumn 2024

Stop, Look, Listen...

10th October 2024 was World Mental Health Day.



We were all asked to take a moment to reconnect with nature. Studies had shown, what many already knew, that spending time near rivers or water helps to reduce stress and anxiety and boosts mental health.

DRiPS Meeting

Thurs 8th November
7.30pm
Memorial Hall
OTFORD

"The precious Darent"

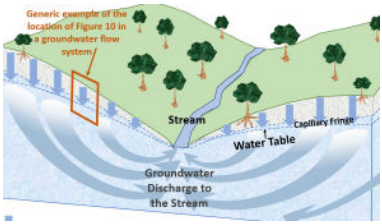
SE Rivers Trust
Darent Valley
Landscape Partnership

See back page

The Hidden Darent

How does our river work?

The Darent is one of 220 chalk streams in the UK. Most of their water is hidden deep underground and the water we see is fed by surface runoff but relies on a "base flow" from hidden springs. Jamie Riches at Thames Water has devised a monitoring programme that will help to build a deeper understanding of how the Darent catchment works - how the river and its tributaries receive and lose water from the underlying Lower Greensand and Chalk aquifers. Thames will carry out monthly spot flow monitoring at 40 various reaches on the river and plans to install continuous flow monitoring at 5 locations.





On behalf of Thames Water, Jacobs Consultants have been collecting three seasons worth of macroinvertebrate data (autumn 2023, spring and autumn 2024) spanning 18 sites. Jacobs have also completed 9 fish surveys this year and are compiling surveys of the river habitat.

We know that the chalk extends well under the channel . Is it posisble that some of the rain that falls on the chalk in the Darent Valley finds its way out to sea. Maybe even to France? See back page.

Exploring chalk streams in Norfolk



DRiPS was invited to join members of the Darent Valley Landscape Project to spend a day with chalk stream guru Charles Rangeley-Wilson, looking at restoration projects on the River Stifkey and the River Nar. They had been able to put back the clock and remeander about 2km of river and reuniite it with the flood plain. The planning had used old maps, lidar and trial digging for gravels to discover the original river bed. Logs were pinned to the river bed and nature was soon able to move in and recolonise the new habitat. It was good to see what could be done when there were still wide and open fields. Some of us mused that about a hundred years ago, much of Kent might have looked a bit like Norfolk does today.



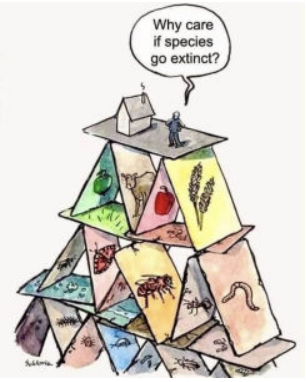
'I' is for infrastructure, both man's and nature's

Nature has been delivering infrastructure like soil, clean air and clean water to us for millions of years. Wetland habitats and the woodland-wide-web have just evolved that way and don't have a governing body (see opposite).

Nature gets everywhere, it's living in the soil, living in the drains, in the deepest ocean vents and in the desert. We forget we are part of Nature.

iNfrAsTrUctuRE

Nature is embedded in our infrastructure and even hidden in the very word. It supports feedback loops and has tipping points which can lead to a new equilibrium. It can support us, or pull us down.
We need to to understand how it works as it supplies everything we have. Loss of habitat and food, air and water pollution will cause any form of life to look for a new home, often with unexpected consequences.
Nature provides food and water and takes away the waste products. It has a capacity to repair itself - it is the ultimate circular economy where there is no waste. If we do not look after Nature, it will have trouble looking after us.



Credit: Caspar Hallmann

It seems that each of us just needs to work with it, try not to consume more than we need, pick up plastic in the street and on the seashore, get a water butt and make a wild space in the garden, and do what we can to support natural infrastructure. And don't build more houses, unless there are resources to build the manmade infrastructure they need.

A broken sewer pipe - somewhere near you?



Nearly every week, we see piciures of burst water mains, spouting water into the air. It's easy to forget that almost all of the water the water companies deliver is eventually returned to them in a sewer, which like the mains supply, is out of sight, underground. It would be foolhardy to assume that those pipes don't have leaks too. Indeed they are typically older and more fragile than the supply pipes. Leaky sewers are slowly poisoning our groundwater. The EA tries to monitor these things around boreholes. Sewage treatment plants try to remove some of the nasties, but given the complexity of what we flush down the toilet, much inevitably gets flushed out to sea.

In our 2023 newsletter, we listed some of the stuff that sewage treatment plants and nature have to cope with:

Uric acid and pooh with protein and fat and bacteria, viruses, antibiotics, pharmaceuticals from our guts. Plus cleaning agents inicluding ammonia and phosphates, shampoo, toothpaste, detergent from our houses.
Plus wetwipes and microplastics, microparticles from tyre wear and brake linings and forever chemicals (PFAS)

We should have included rainwater! Why did planners ever allow rainwater into our sewers? It can only overload expensive sewage treatment plants.
Rainwater belongs in the aquifers!

Nye, north of Aarhus, is the first new town in Denmark to establish a centralised secondary water treatment plant. The plant reuses collected rainwater and drainage water for toilet flushing and laundry, thereby significantly reducing the impact on groundwater resources.

Did you know we have a National Infrastructure Commission?



It's chaired by Sir John Arimitt, an eminent civil engineer who has led many sucessful projects. The NIC was established in 2015 as part of the Treasury. It's just been merged with a National Infrastructure and Service Transformation Authority, NISTA. You too can Google for these things.

We are not sure whether the scope of the NIC includes support for natural infrastructure. But their report from October 2023 begins

The good news is that modern, reliable infrastructure can support economic growth, help tackle climate change and enhance the natural environment. We stand at a pivotal moment in time, with the opportunity to make a major difference to this country's future. But we need to get on with it.

Could the Darent Valley be part of a UNESCO Global Geopark?



A shared heritage beneath our feet

Kent Wildlife is working with Parc Naturel Regional des Caps et Marais d'Opale. to secure UNESCO Cross-Channel Geopark status. It will be the first Global Geopark connected by a marine area. https://kentdowns.org.uk/geopark/

Hundreds of thousands of years ago a catastrophic flood swept away the chalk ridge connecting Dover and Calais, carving out the white cliffs of Dover and starting Britain's history as an island. The Kent and French coasts are actually still connected today by the layer of chalk which runs below the Channel.

There are 177 UNESCO Global Geoparks in 46 countries and the list is growing.

The DRiPS committee meets throughout the year with the **Darent and Cray Catchment Improvement Group**. It is chaired by the SE Rivers Trust and NWKCP and is a forum for all organisations with an interest in the Darent and Cray river systems.

Come to the Otford meeting and find out more. Join DRiPS for just £10 a year for individuals or £20 for organisations

Email us at darentdrips1985@gmail.com if you'd like to help with the DRiPS website or admin. Email **mark.gallant@kent.gov.uk** if you'd like to join a volunteer work party.

www.darent-drips.org.uk

DRiPS Autumn Meeting

Memorial Hall Otford TN14 5PQ

Thursday 28th Nov



7.30pm

Doors open 7.00pm

Short AGM

"The Precious Darent"

Dr Jack Hogan SE Rivers Trust



Steve Crowley DRiPS



Non-members welcome

Stuart Merrylees (Chair) 01959 563296