"In order to realise the true value of nature, to protect it, conserve it and to connect with Derrynane's wilderness you need to know what is there first."

Vincent Hyland

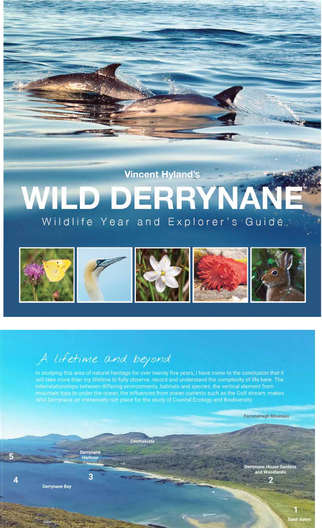
SAMPLE

BOOK AVAILABLE SPRING 2019

About the book
160+ pages, full colour.

This book takes you through Wild Derrynane's annual wildlife calendar. Read about Vincent's own encounters with Derrynane's incredible wildlife. Explore the area's biodiversity and ecosystems like never before. Monthly 'at a glance' highlights including stories about species, their interactions and appearances. Gain insight into some of Derrynane's iconic species including the lifecycle of the endangered Natterjack Toad. Go underwater with dolphin species and see marine life, like never before. Visit offshore islands and discover the seabirds nesting there. Use the book to identify and compliment your own observations in the eld and use the seasonal guides to discover wildflowers, moths, butteries, trees, mammals birds, seashore life and much more.

Are you interested in purchasing this book?
Register now to receive updates and information about the book including launch dates and availability to purchase online.



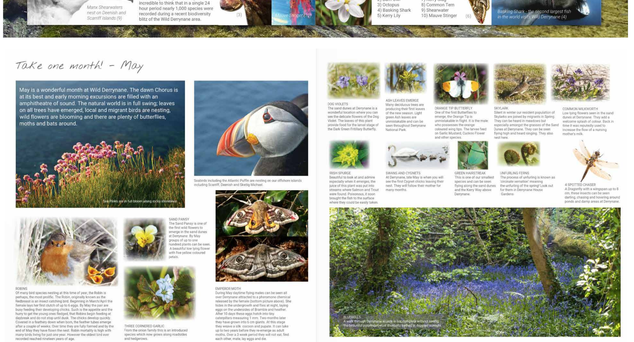
Vincent Hyland's

WILD DERRYNANE

Wildlife Year and Explorer's Guide

So what is Wild Derrynane?

Wild Derrynane is a place that we share with plants and animals that are both resident and migratory. While we appreciate the scenic value of this Southwest corner of Ireland's Wild Atlantic Coast the reality of life here is also one of survival. Against wind, rain, tides, ocean currents, sunlight, environmental pressure and predation, the flora and fauna of Derrynane continues to live on. In the following pages I will give you some amazing insights into this world, the world of Wild Derrynane



A lifetime and beyond

In studying this area of natural heritage for over twenty five years, I have come to the conclusion that it will take more than my lifetime to fully observe, record and understand the complexity of life here. The intersectionalcross between differing environments, habitats and species, the vertical elermant from mountain tops to under the ocean, the influences from ocean currents such as the Gulf stream, makes Wild Derrynane an immensely rich place for the study of Coastal Ecology and Biodiversity.

Look around you!

What wild things have you observed whilst out walking, swimming, snorkelling, diving or boating? It is incredible to think that in a single 24 hour period nearly 1,000 species were recorded in the marine and terrestrial bits of the Wild Derrynane area.

More Shearwaters, Gannets, Kittiwakes and Scarriff Islands (5)

The Kerry Cow (6)

Take Ten Species

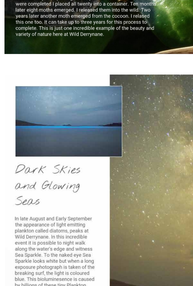
Places where you can see Wildlife

1) Natterjack Toad
2) Dolphins
3) Octopus
4) Basking Shark
5) Kerry Lily
6) Empress Moth
7) Puffin
8) Common Tern
9) Shearwater
10) Mauve Stinger

Basking Shark - the second largest fish in the world (up to 10 tonnes) (4)

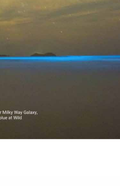
Take one month! - May

May is a wonderful month at Wild Derrynane. The dawn Chorus is at its best and early morning excursions are filled with an encyclopaedia of sound. The natural world is in full swing, leaves on all trees have emerged, local and migrant birds are nesting, wild flowers are blooming and there are plenty of butterflies, moths and bats around.

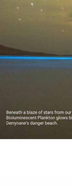


Feathers get full turbaned sleeping only in Autumn

Seabirds including the Atlantic Puffin are moving we our offshore islands including Scarriff, Deenish and Sherkin Island.



DARTFORD WARBLER
Dartford Warbler nesting. Flying insekts can be seen all over Derrynane attracted to a phenomone chemical released by the male Emperor Moth. The female moth stays in the undergrowth and from a single, newly emerged female Emperor Moth, as many as another 2000 10 Euro Notes-sized moths into caterpillars measuring 1 mm. Tree monitts lose their leaves in May and June. Many of these moths they ensure a safe, secure and popular. It can take up to two years before they re-emerge as adult moths. Many of these moths are active at night. Find each other, mate, lay eggs and die.



SAGE FINTIT
Sage Finfit nesting is one of the first wild flowers to emerge in the sand Dunes and Woodlands. It is also present all on the Derrynane Estate. A beautiful low lying flower with a white coloured with it.

THREE CORNERED GARLIC
Even the small family firms is an introduced species that has become grows along roadsides and hedgerows.

ROBIN
Many wild species nesting at this time of year, the Robin is unfussy, the more untidy the more unspectacular the better. Robins are very territorial and the male and female have her first clutch of up to 6 eggs. By May the pair are on their second clutch of eggs. The Robin is also one of the few to call the dominant bird. But Robin's have finding a blackcap and do not stop until dead. The chicks develop quickly and are ready to leave the nest after 14 days and are capable after a couple of weeks. Once they are fully fledged and by the end of May they have flown the nest. Robin mortality is high only 1 in 3 survive their first year of life. The oldest rich been recorded reached nineteen years of age.

When the Emperor met the Empress

This is the story of how I raised a family of Emperor Moth caterpillars at Wild Derrynane.

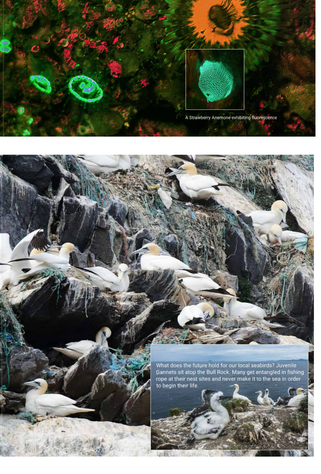
One night in April we heard a knocking on our window. Upon investigation I discovered a large moth that I had never before seen. I caught it and placed it in a jar and took some photographs for identification purposes. Butterfly like and with four large eye spots I discovered that it was a female Emperor Moth. The next morning I let her go in the back of the garden. Looking for a mate, the male of the species flies during daytime, lured by a pheromone releasing female who hides in the undergrowth. She flies at night laying her eggs on the undersides of leaves such as bramble or heather. Eagle Rock above Ballycarbaun is one of their preferred mates.

When I inspected her jar the next morning, I noticed twenty eggs on the bottom of it. I put the first few eggs back? Ten days later the eggs began to hatch. Tiny black caterpillars emerged and ate them for fifty six days on bramble leaves. Over the period they shed their skin at least four times and grew to an incredible 8 5cm in length. They were bright green in colour. I saw them spinning thread whilst they made their cocoons. They are Ireland's only silk spinning moth species. Whether cocoons are spun communally or individually is unknown. My caterpillars later eight months emerged. I released them into the wild. Two years later another moth emerged from the cocoon. I released this one too. It can take up to three years for this process to complete. This is just one incredible example of the beauty and variety of nature here at Wild Derrynane.

Dark Skies and Glowing Seas

In late August and Early September the appearance of light emitting plankton called diatoms, peaks at Wild Derrynane. In this incredible event it is possible to night walk through the shallow waters and see Sea Sparkle. To the naked eye Sea Sparkle looks white but when a long exposure photograph is taken of the breaking surf, the light is coloured blue. This bioluminescence is caused by billions of these tiny Plankton organisms. When in the water they are agitated by churning waves. A chemical reaction within the Diatom's single-celled structure is responsible. Wild Derrynane is at the core of the Kerry International Dark Sky Reserve. On many clear dark nights it is possible to see our Milky Way Galaxy as well as a host of planets including Mars, Jupiter and Saturn.

Beneath a blaze of stars from our Milky Way Galaxy, Bioluminescent Plankton glows blue at Wild Derrynane's danger beach.



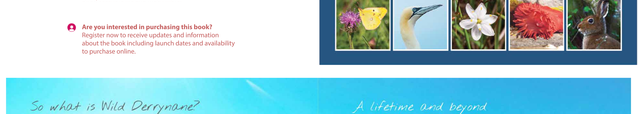
In 2010 Wild Derrynane was treated to an amazing astronomical coincidence. A total eclipse of the moon that coincided with the Winter Solstice. Snowfall had covered the area and it was initially doubtful as to wether I would be able to see the moon as it passed through the Earth's shadow. As luck would have it the entire eclipse was visible and it allowed me capture some incredible video and still images. This event was the first such coincidence since the year 1638. The next one will be on December 21st in the year 2094.

Left: The Milky Way over Wild Derrynane. The Skellig Light is just visible in the lower right hand corner

Alien Invaders

Walking, diving, observing and studying the biodiversity of Wild Derrynane turns up many unexpected gems. Some, like the arrival of Humming Bird Hawk Moths or Clouded Yellow Butterflies are exceptional and warrant further investigation. In one instance the arrival of Portuguese Man of War's was a major event. Not just because they give a really nasty sting, more to the point as to what were they doing here?

Prevailing winds and ocean currents play a big part in what arrives along the Wild Derrynane coastline. Portuguese Man of War's belong to a group of animals called Siphonophores. While it looks like a Jellyfish it is not and is classed as a marine hydrozoan consisting of a community of animals. These specialised individuals live and work together and cannot survive without each other. The samples you see here were sent to the National University of Galway as part of a research project to find the best cure for Man of War stings. As it turns out applying Vinegar and hot water is best.



Fluorescent Marine Life at Wild Derrynane

Main image: Cup Corals and Sea Anemonies fluorence under blue light

Certain aquatic plants and animals fluorence when illumed. The phenomenon of fluorescence is prepondernt in marine plants and animals is a new area of study for me. In this series of photographs taken in wintertime, I witnessed two Anemone species (Snakelocks and Strawberry) exhibiting fluorescence. What we see in white light is different to what we see when nighttime falls. As dark falls on land, descending to the dark depths is a real sensory experience, it is pitch black. By using light in the blue wavelength and yellow filters it is possible to witness this incredible exhibition of underwater plant and animal fluorescence. As I explore the night time waters of Wild Derrynane I continue to happen upon a range of animals that exhibit fluorescence including fish, shellfish, jellyfish, corals and marine plants. This is the first time that this display has been photographed in Ireland.

What the hell are we doing to our oceans?

From pristine to heavily polluted. Forty five years ago there were no plastics washing ashore on Derrynane's beaches. Today it is a differing picture. Plastics, fishing net, rope and microplastics is to be found along every stretch of our coastline. Originally, at the Bull Rock and Little Skellig, Gannets made their nests out of seaweed. Today it is a different story. They make their nests out of rope made from plastic, discarded by the fishing industry and from manufacturers who will not change their production method. Our oceans are filled with plastic waste, from a consumer society depositing their waste into rivers and throwing objects overboard. Because of this makes its way to the sea. Once here it is consumed by seabirds, whales, fish, turtles and other marine life right down to plankton. Many marine creatures die from entanglement. A lot die from ingestion.

According to a major World Wildlife Fund report (2018), since 1970, the decade I learned to scuba dive in, we have wiped out more than 60% of the world's wildlife including mammals, fish and birds. This annihilation now threatens our very existence.

Photograph right: Made from discarded fishing rope, nets and plastic waste Gannet nests at Skellig make for around 60% of all nests on little Skellig. Not the Gannets fault but ours, the entire rock at Skellig Beag resembles a human rubbish dump.