



# ISLANDER<sup>®</sup>

## RATHLIN KELP

### Islander Rathlin Kelp

The McFaul family, a 4th generation island fishing family, grow, harvest, process and export organic kelp to specialist food retailers, distributors and restaurants around the world. They are growing their kelp (a type of seaweed) near Church Bay in Rathlin Island, where environmental conditions are perfect. Kelp grows organically without any additives or fertilisers, which not only reduce costs but makes kelp an environmentally sustainable vegetable. The kelp forests also provide an important habitat for sea life.

As the kelp grows, it extracts minerals from the sea to provide us with healthy levels of calcium, iron, and small amounts of potassium, magnesium and sodium. It is also a natural and safe source of iodine, being particularly good for those short of iodine and with thyroid problems.

The kelps of the northern hemisphere occur at and below tide height. They are a large group of brown seaweeds that live on the seabed to depths which sunlight penetration will allow - at around 10 to 20 metres.

Islander Kelp organically farms three types of kelp (*Laminaria digitata*, *Saccharina latissima* and *Alaria esculanta*) in a Marine Conservation area off the Rathlin coastline. From starting off the kelp plants in their nursery, to packaging the fresh kelp products; it all takes place in their facility on Rathlin Island, reducing the need for transport of materials during the production process.

Islander kelp is unique because once they harvest it from their organic farm, the kelp is kept fresh, never dried. It is blanched, to bring out its vibrant colour and to remove unnecessary salt, and then frozen, allowing for a 1 year shelf-life.

## Rathlin Island and the Marine Conservation Zone

Rathlin Island is the northernmost point of Northern Ireland. The Marine Conservation Zones (MCZs) surround Rathlin Island, with a large extension between the north of the Island and the North Channel. The site includes other Marine Protected Areas (MPAs): Rathlin Island Special Area of Conservation (SAC) and Rathlin Island Special Protection Area (SPA).

The designation of MCZs protects vulnerable or unique marine species and habitats of national importance in the Northern Ireland. These MCZs fulfil the obligations on The Marine Act (Northern Ireland) 2013 (the "Act") to contribute to wider biodiversity commitments at European and global level. Kelp forests have been described as one of the most ecologically dynamic and biologically diverse habitats on the planet.

The different structural parts of the kelp plants offer shelter and habitat for marine plants and animals, particularly invertebrates. They can support communities of epiphytes (plants that grow on other plants). Kelp provides some of the food for invertebrates that feed on suspended particles in the water (suspension feeders) and dead matter at the bottom (deposit feeders). These suspension and deposit feeders, in turn serve as prey for other animals. Kelp detritus (dead organic matter) on the shore is also consumed by various invertebrate and bird species.



The large amount of animals moving in and around kelp beds, makes it an important habitat in the diet of fish species. Kelp forests also provide a foraging habitat for birds who gather to eat the associated fish populations. Some invertebrates and fish attach their eggs to kelp, while others, such as salmon use the protection of the kelp habitat as an important nursery area to raise their young.

Rathlin island has been designated an MCZ as it has a deep sea bed, black guillemots and important geological features. The MCZ contains the only known location of the broad scale habitat, deep-sea bed in Northern Irish waters. This habitat is particularly unique in Northern Ireland inshore waters.

Rathlin Island also supports a large population of black guillemots that nest within the Island's cliffs. Although black guillemots are common throughout Northern Ireland, there is a significant breeding and nesting population within Rathlin Island. Their reproductive success here may be related to the highly productive waters and rich feeding grounds within the MCZ.



### What are the Benefits of Islander Kelps

- Kelp grown on ropes has a finer texture than hand harvested kelp.
- Their kelp farm creates a safe haven for sea-life and bird-life and so supports ecosystems.
- Farming ensures that they do not deplete wild source of kelp.
- Farming needs no fertilisers or fresh water in contrast to soil based farms.
- It's believed that kelp will become a major food source for Europe, as it is already in Asia. Currently, European based seaweed companies sustainably hand harvest; however Islander Kelp believe that kelp will become so popular the product will need to be farmed to keep up with the demand.

### LFN Principles Supported

- Nature provides multiple benefits – using naturally growing kelp **without** the need for additives utilises natural nutrient cycles and process for both the benefits of humans, the environment, and wider biodiversity.
- Sustainable agriculture - it grows all year round and is an important habitat for wildlife.
- Waste equals food – any waste from the kelp can be broken down naturally by decomposers making nutrients available for other organisms.
- Solar income – kelps use light to photosynthesis to produce sugars for growth. Solar income is a renewable source of energy.

### Why are Kelp Habitats Under Threat?

Kelp forests support diverse and productive ecological communities throughout temperate and arctic regions worldwide, while also providing numerous ecosystem services to humans. Scientific studies suggest that kelp forests are increasingly threatened by a variety of human impacts, including climate change, overfishing, and direct harvest. To try and effectively manage this ecosystem, increased monitoring is required aimed at understanding how kelp forests are responding to these human effects locally.

## Islander Rathlin Kelp Products

**Laminaria digitata (Kombu)**

A seaweed with a superb “al dente” texture. Can be used in a variety of ways: use as a noodle replacement, add to pasta, soups, stir-fries, curries, salads – the list is endless.

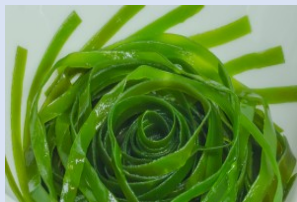
**Alaria esculante (wakame)**

A fine textured seaweed with a long rib running down the frond. Popular in Japanese restaurants as a wakame salad or added to miso soup. The subtle flavour and texture is a great addition to green salads and more.

**Saccharina latissima (Sugar Kelp)**

The frond of this seaweed is quite frilly, giving the noodles/tagliatelle a wrinkled look. The flavour is a bit nutty and a bit sweet with a delicate texture.

The kelp can be cut or used in a number of ways - Tagliatelle & Noodle Cut, Salad Cut, Minced Cut and to create Pesto



*Laminaria digitata: Tagliatelle Cut*



*Alaria: Noodle Cut*



*Saccharina: Tagliatelle Cut*



*Laminaria digitata: Minced*



*Laminaria digitata: Chopped*



*Laminaria digitata: Noodle Cut*



Their products are winning awards. This one for their pesto



Islander Rathlin Kelp has been shortlisted as a finalist in the prestigious **BBC Food & Farming Awards 2017**

For more information on Islander Rathlin Kelp visit their website at;

<http://islanderseafood.com/>

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### Useful websites & videos;

<http://www.seaweedsarah.com/index.html>

<https://www.youtube.com/watch?v=yejWPKZP0yw>

<https://www.npws.ie/sites/default/files/publications/pdf/IWM17.pdf>

<http://www.wildlifetrusts.org/news/2016/01/15/second-wave-marine-protection-welcomed-23-new-marine-conservation-zones-announced-to>

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