

# Sussex Inshore Fishing Effort 2019 – 2023

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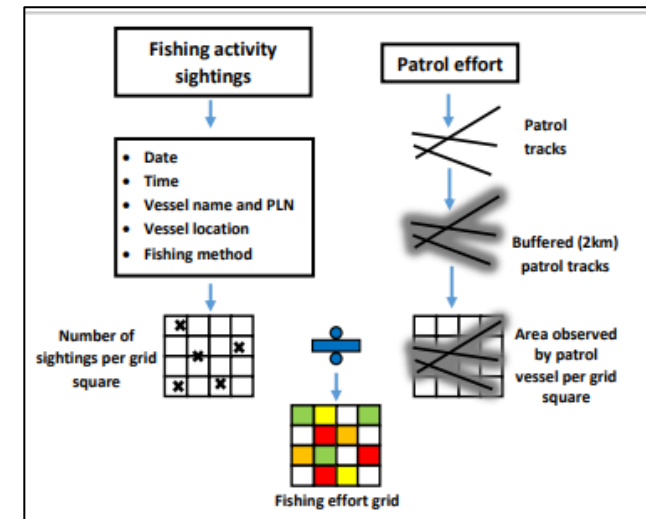
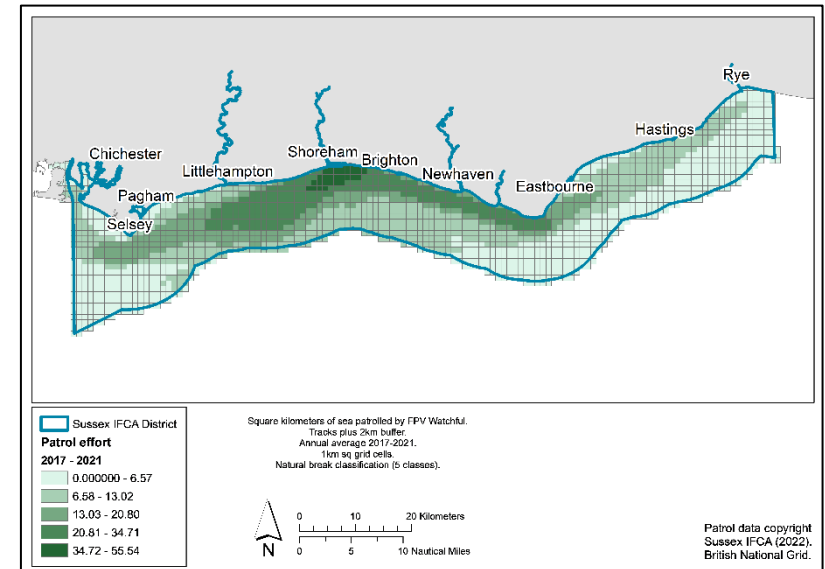
## Introduction

Since 2001, the Sussex Inshore Fisheries and Conservation Authority (IFCA) and its predecessor, the Sussex Sea Fisheries Committee, has collected data on observed fishing activity whilst on sea patrols. Over 20,000 vessels have been observed, 4,014 of which were between 2019 and 2023, the five-year period which is the focus of this report.

## Methodology

When the Fisheries Patrol Vessel (FPV) was at sea on routine patrols, the fisheries officers recorded fishing activity, including date, time, vessel name and PLN (port letters and numbers), latitude and longitude location of the fishing vessel, and fishing method (gear type). As the FPV is based in Shoreham, the area around the port is more frequently patrolled, therefore there are likely to be more observations in this area.

To remove this bias, fishing effort was calculated by dividing the number of sightings by patrol effort. Patrol effort was calculated by applying a 2km buffer to the FPV track. This was considered the maximum distance at which a fishing vessel and its activity could be identified, under average conditions. The annual average area of sea patrolled per 1km<sup>2</sup> grid cell was calculated. The number of fishing vessel sightings per 1km<sup>2</sup> grid cell was divided by the area of sea patrolled, to equal the number of fishing vessels per km<sup>2</sup>.

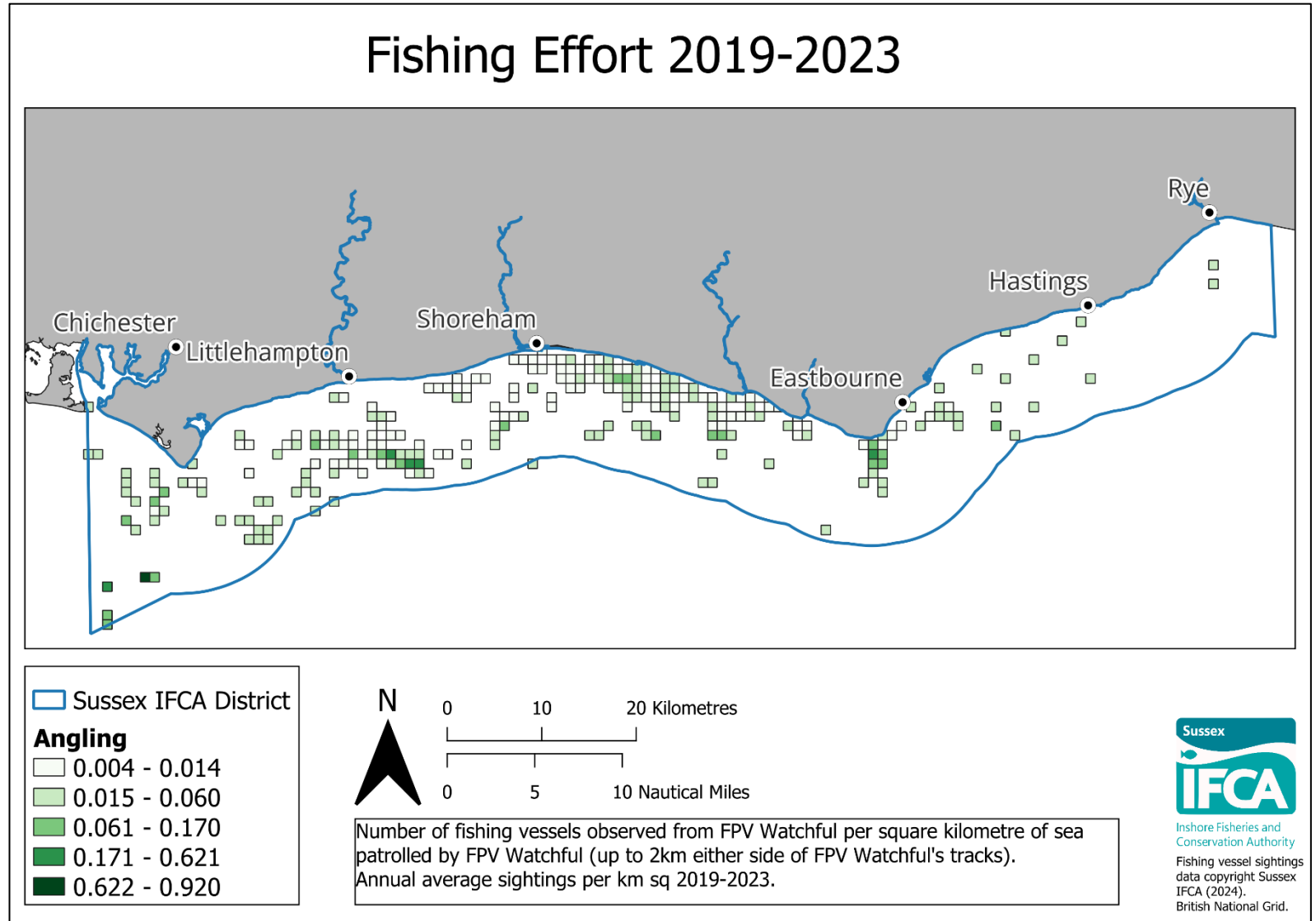


## Angling (commercial and recreational)

Commercial angling occurred on registered fishing vessels which were licenced to sell their catch. Recreational angling occurred on both private and charter vessels.

The maximum fishing effort was 0.920 vessels per km<sup>2</sup> and fishing vessels were observed over 255 grid cells.

Angling vessels were observed across the District, with the highest effort south of Littlehampton. This is the area in and around Kingmere Marine Conservation Zone, a renowned area for black seabream angling.

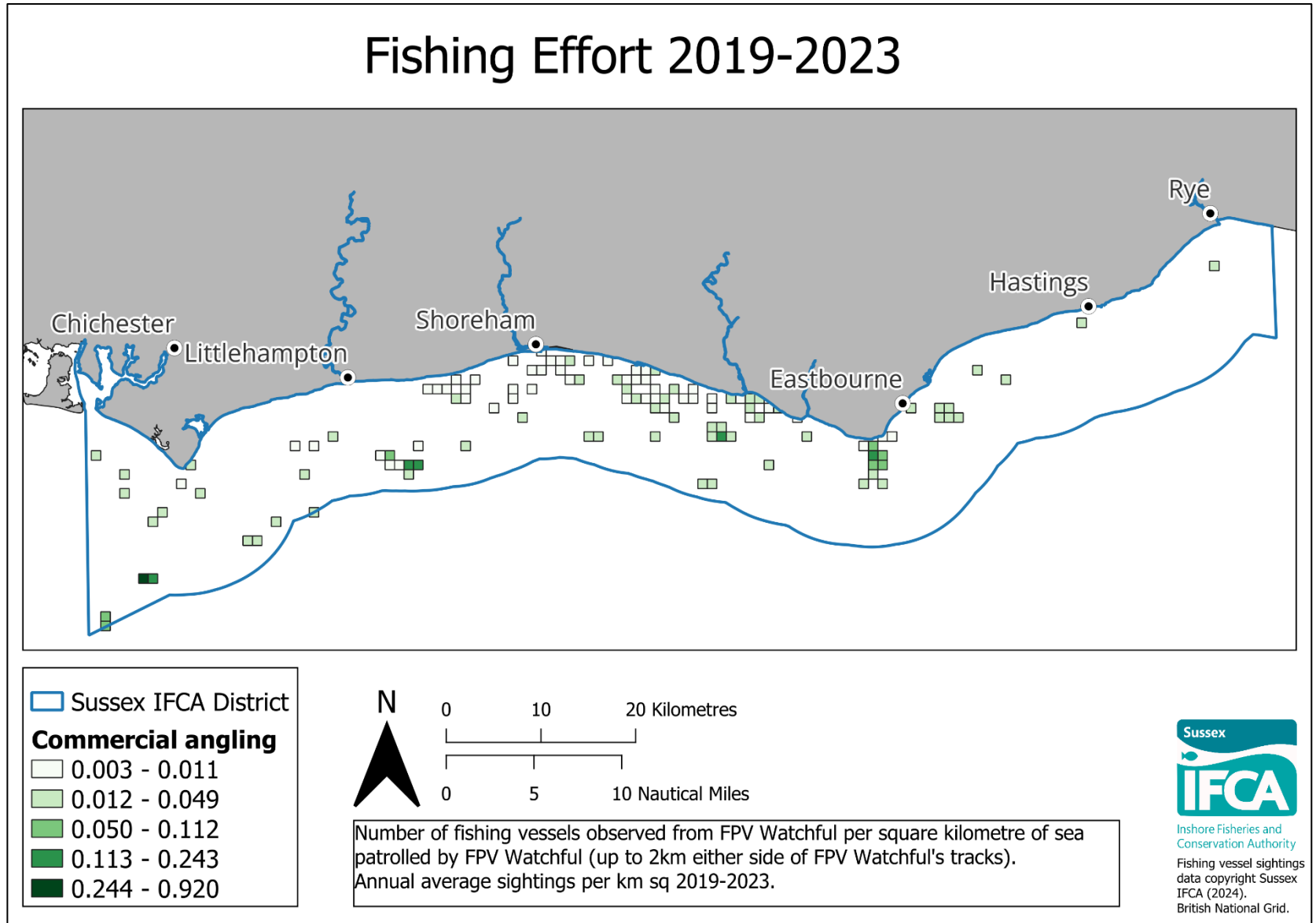


## Angling - Commercial

Commercial angling occurred on registered fishing vessels which were licenced to sell their catch. The most frequently targeted species was European sea bass.

The maximum fishing effort was 0.920 vessels per km<sup>2</sup> and fishing vessels were observed in 120 grid cells.

Commercial angling was observed across the entirety of the District, with the highest effort South of Littlehampton and between Newhaven – Eastbourne.

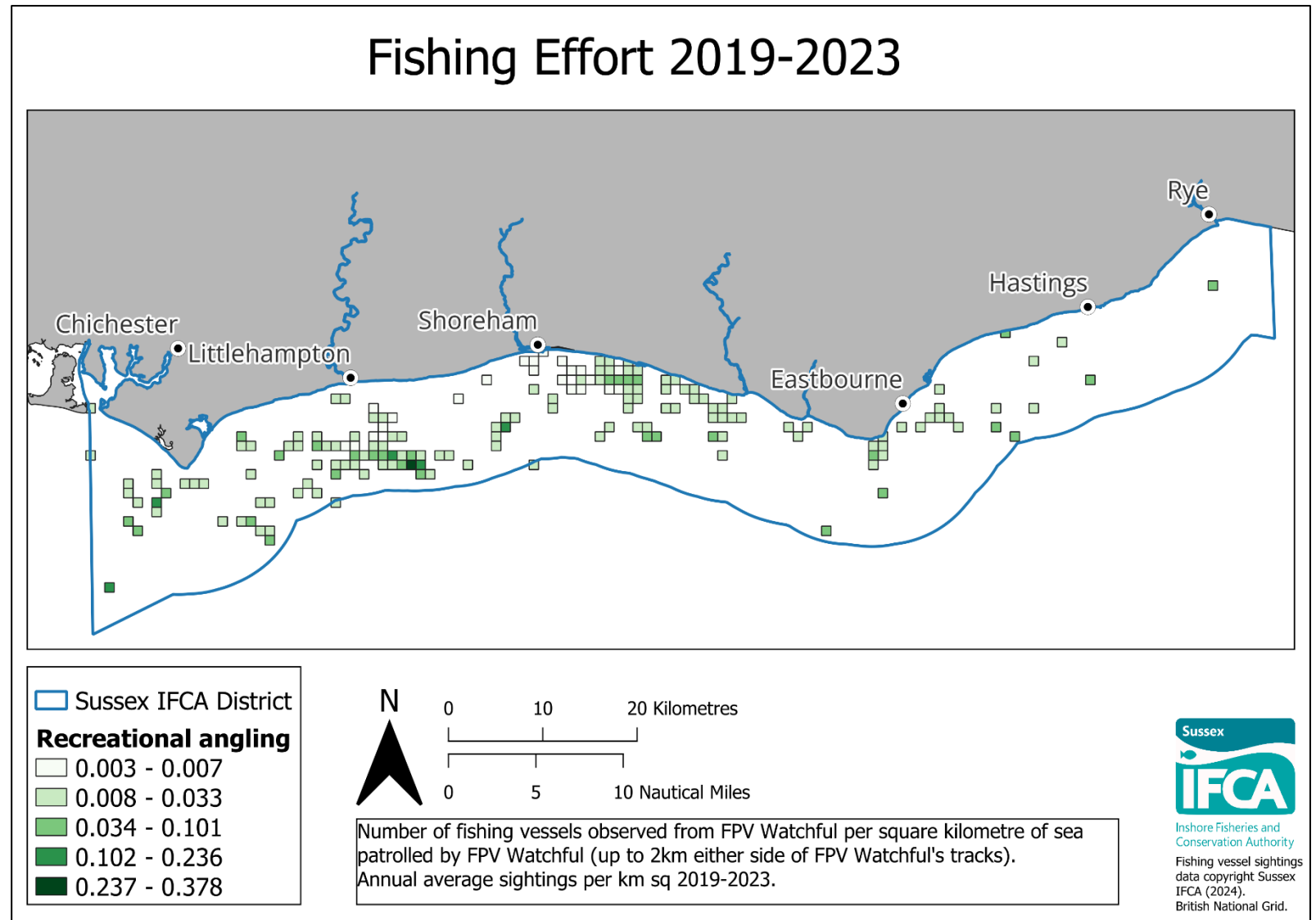


## Angling – Recreational

Recreational angling occurred on both private and charter vessels. Any catch was for personal consumption, not for sale.

The maximum fishing effort was 0.378 vessels per km<sup>2</sup> and fishing vessels were observed in 176 grid cells.

Angling vessels were observed across the district, with the most effort south of Littlehampton. This is the area in and around Kingmere Marine Conservation Zone, a renowned area for black seabream angling.

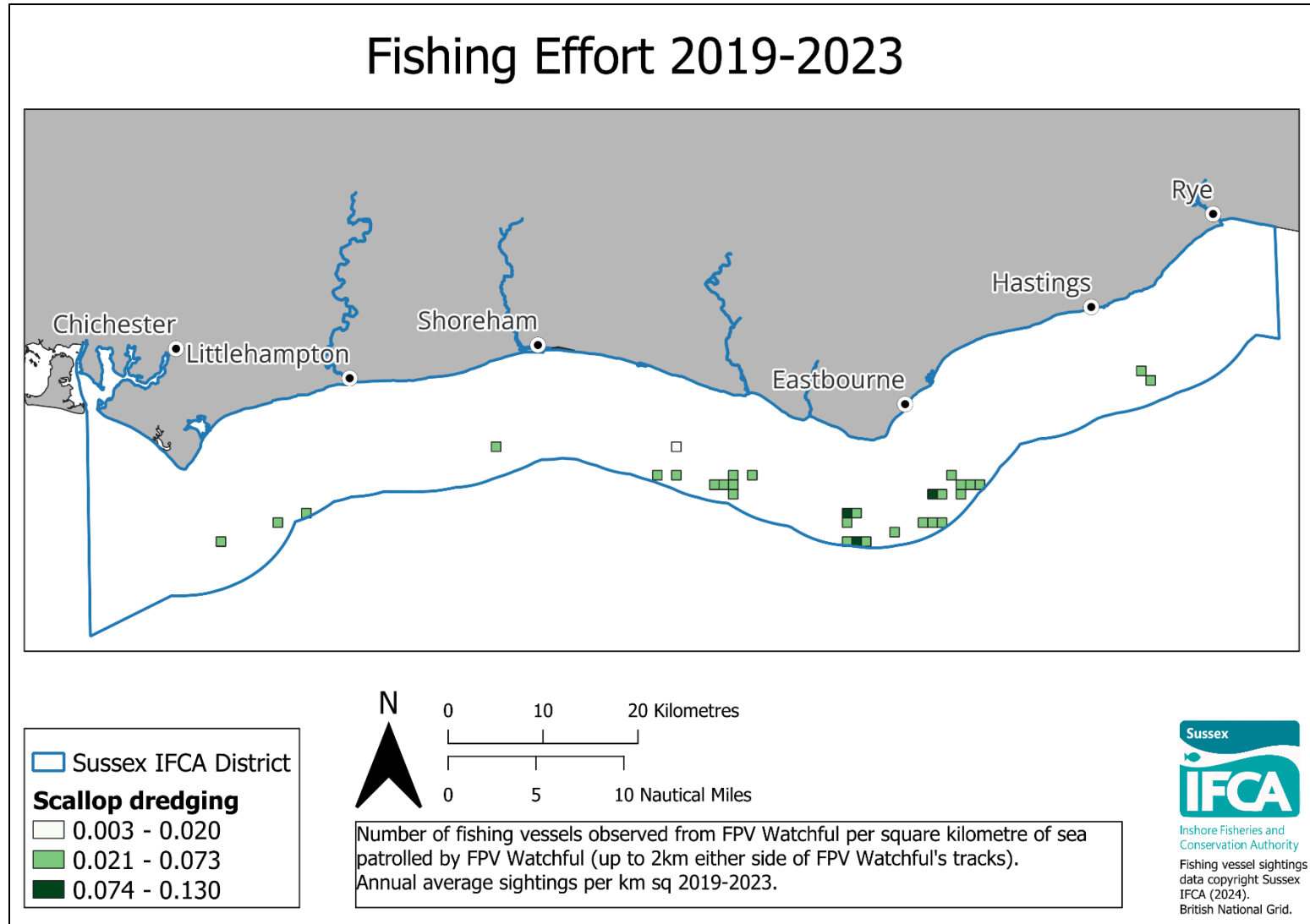


## Dredging - scallop

Scallops accounted for the greatest weight and value landed in Sussex ports between 2019 and 2023, but most were caught outside the District. Scallop dredging is not permitted inside of the 3 nautical mile limit.

The maximum fishing effort was 0.193 vessels per km<sup>2</sup> and fishing vessels were observed in 32 grid cells.

Dredging targeting king scallops (*Pecten maximus*) is only permitted to occur in the District outside of the 3 nautical mile limit.

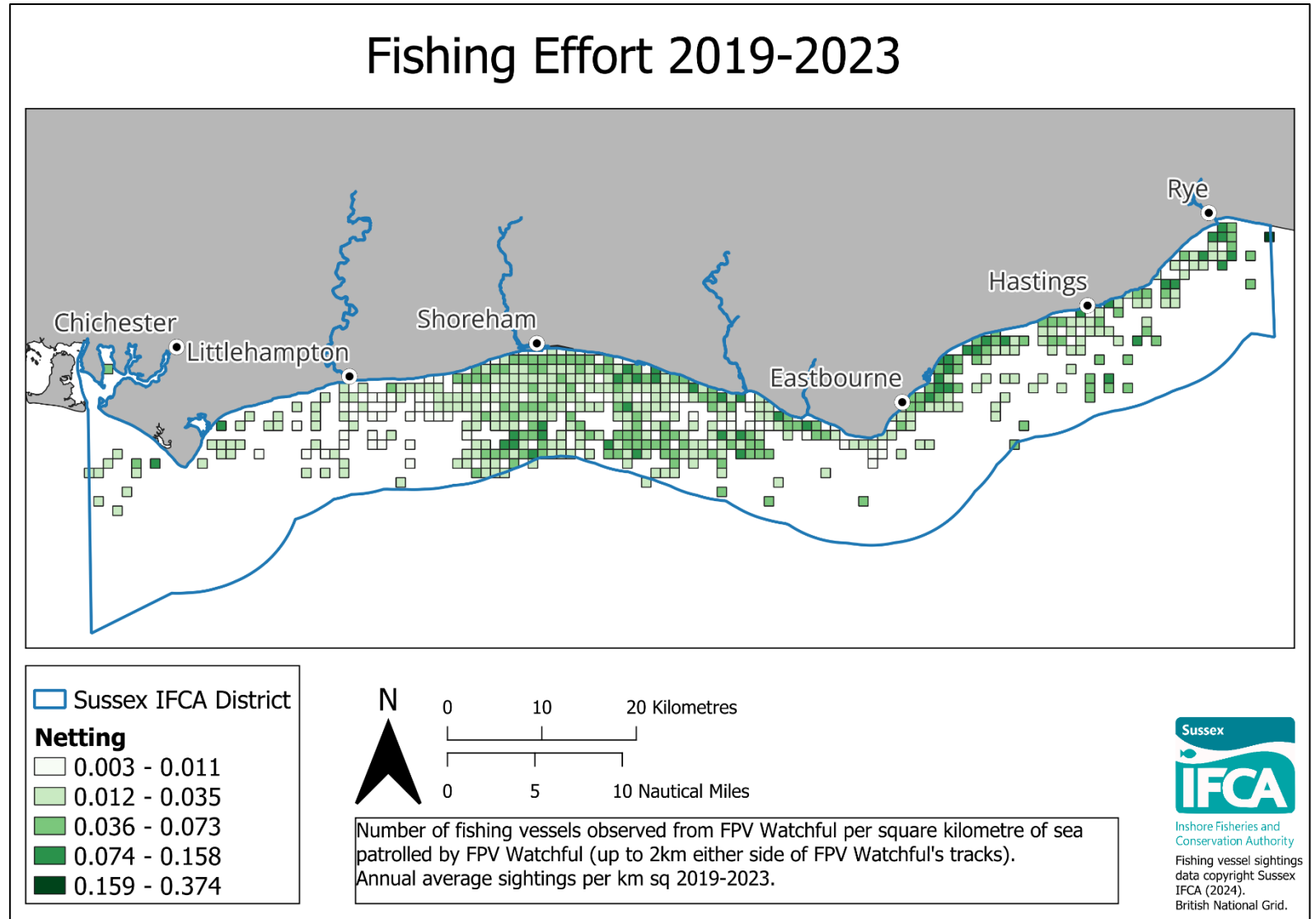


## Netting (fixed and drift)

Netting included gill, entangling and trammel types, either fixed – anchored to the seabed – or drift – allowed to move with the current with the fishing vessel in attendance.

The maximum fishing effort was 0.374 vessels per km<sup>2</sup>, and it covered the most grid cells (525) of all main methods of fishing.

Most of the fishing effort occurred between Shoreham and Rye.



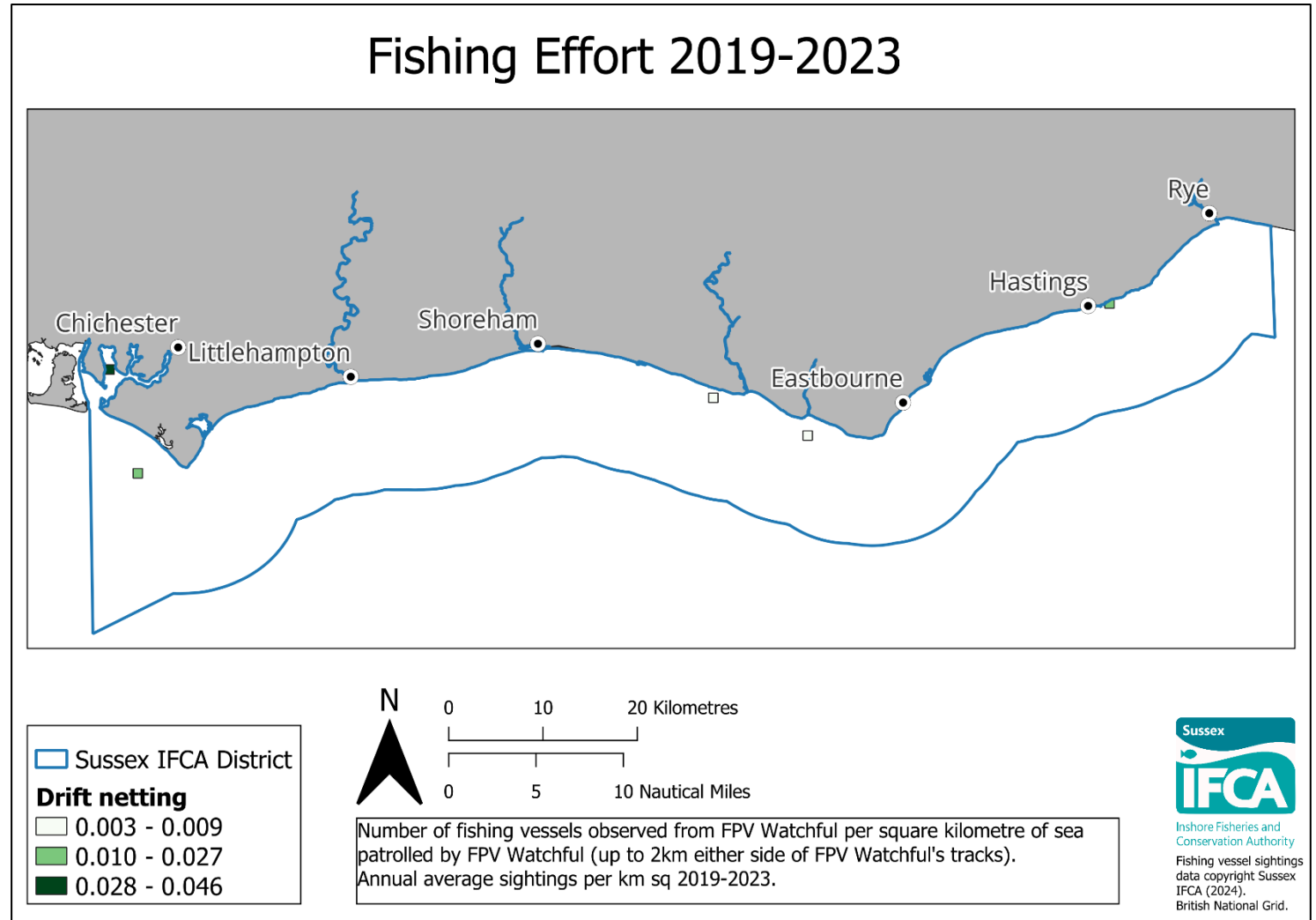


## Netting - drift

Usually, one end of the drift net is attached to the fishing vessel and both drift with the tide, targeting pelagic species (those in the water column, as opposed to near the seabed). The main target species for drift netting was bass but management restrictions in recent years have reduced the fishing effort.

The maximum fishing effort was 0.046 vessels per km<sup>2</sup>. This was the least commonly observed method of fishing, with vessels being observed in just 5 grid cells.

Drift netting occurred in Selsey, Cuckmere, and Hastings.

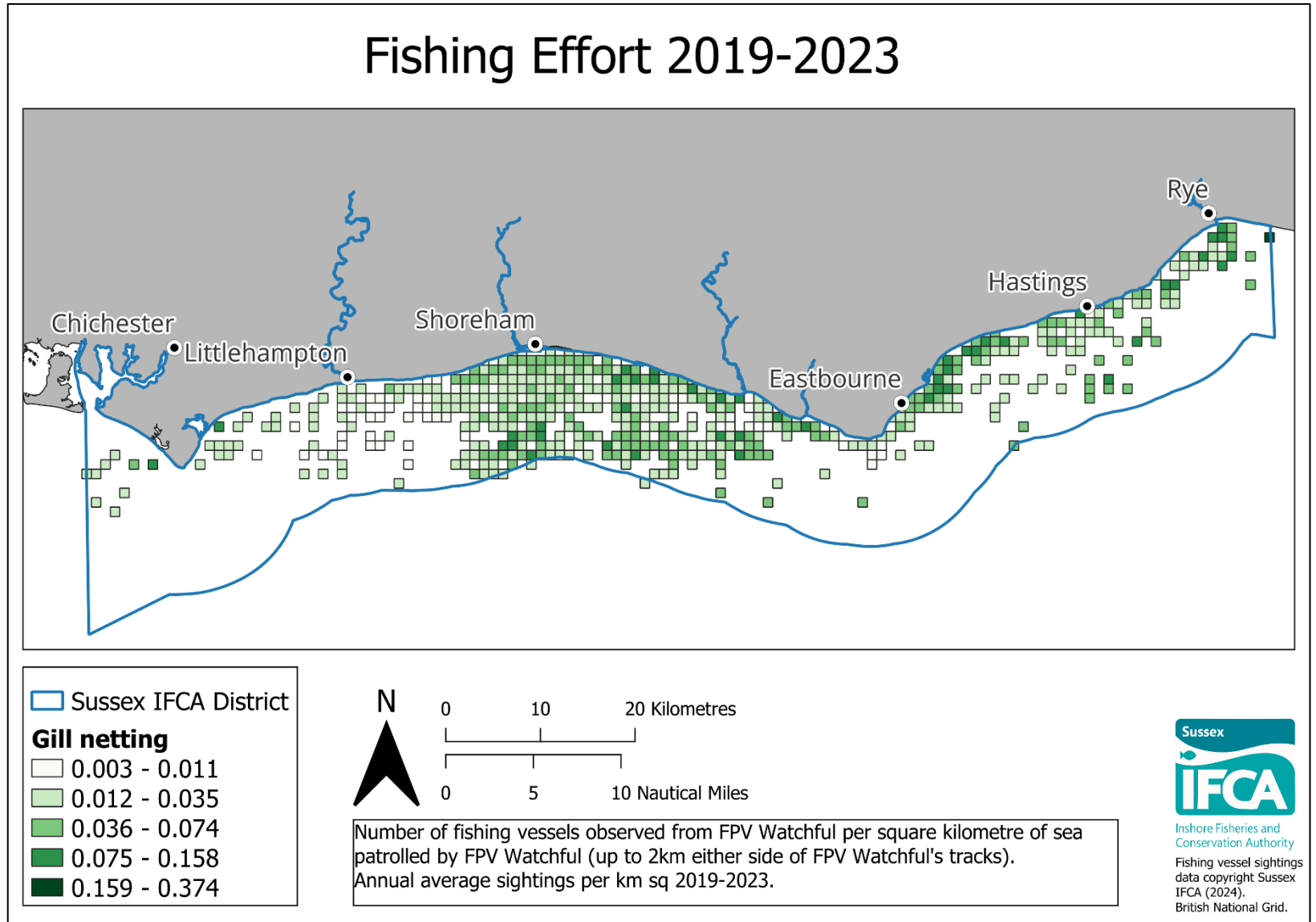


## Netting - fixed

Fixed or set nets are anchored to the seabed and can be gill, entangling or trammel types. They targeted a mix of species including sole, plaice, bass, cod, and rays. Sole was the third most valuable species landed in Sussex ports (after whelks and scallops).

The maximum fishing effort was 0.374 vessels per km<sup>2</sup> and fishing vessels were observed in 522 grid cells.

Netting was widespread across the District, with most effort occurring between Shoreham–Rye.

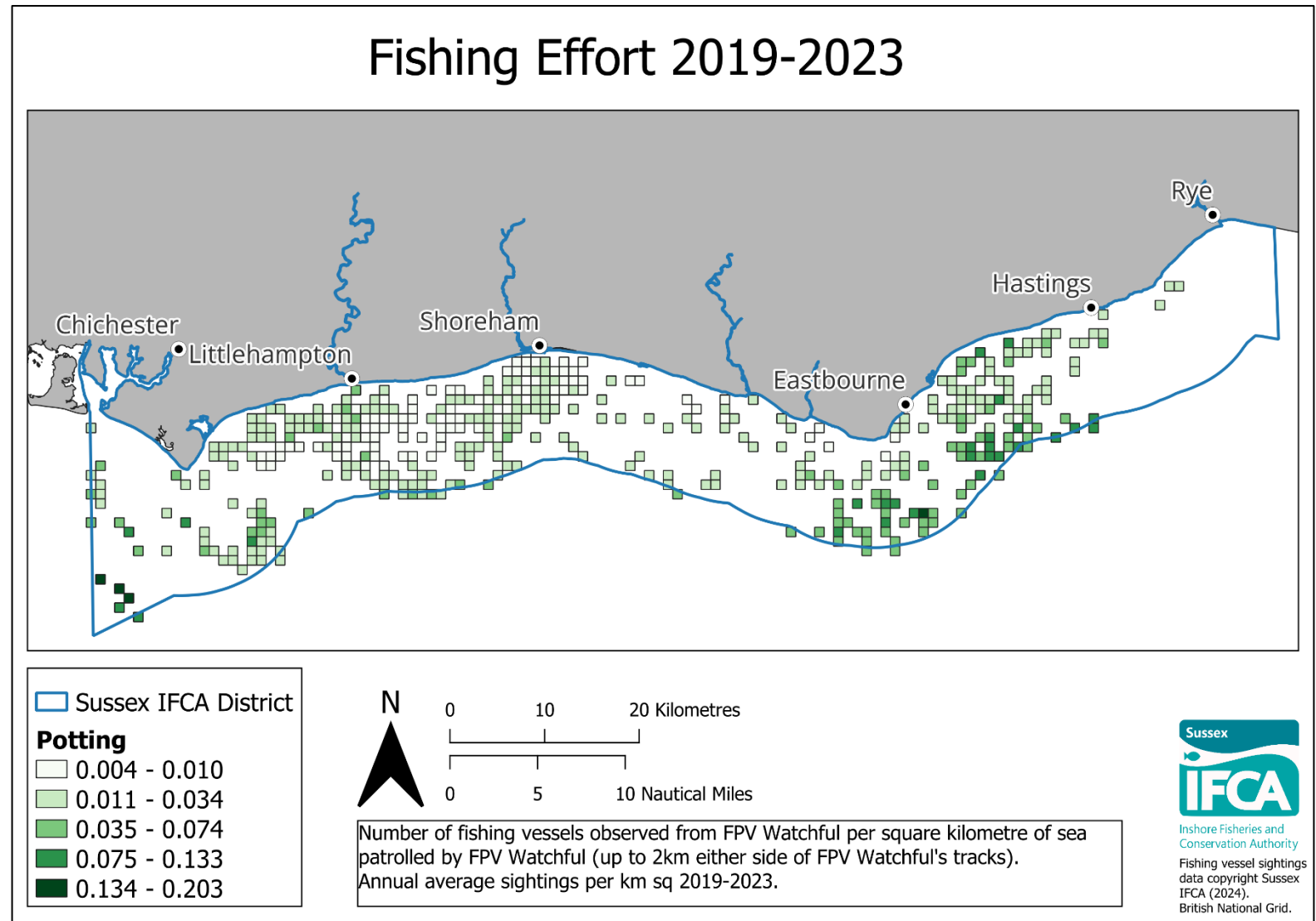


## Potting (crab and lobster, cuttlefish and whelk)

Pots, traps or creels were used to catch shellfish and this is governed by the Sussex IFCA Shellfish Permit Byelaw.

The maximum fishing effort was 0.203 vessels per km<sup>2</sup>. Potting occurred across 436 grid cells.

Potting occurred across the District, with most effort Chichester Harbour - Shoreham and Newhaven – Eastbourne.

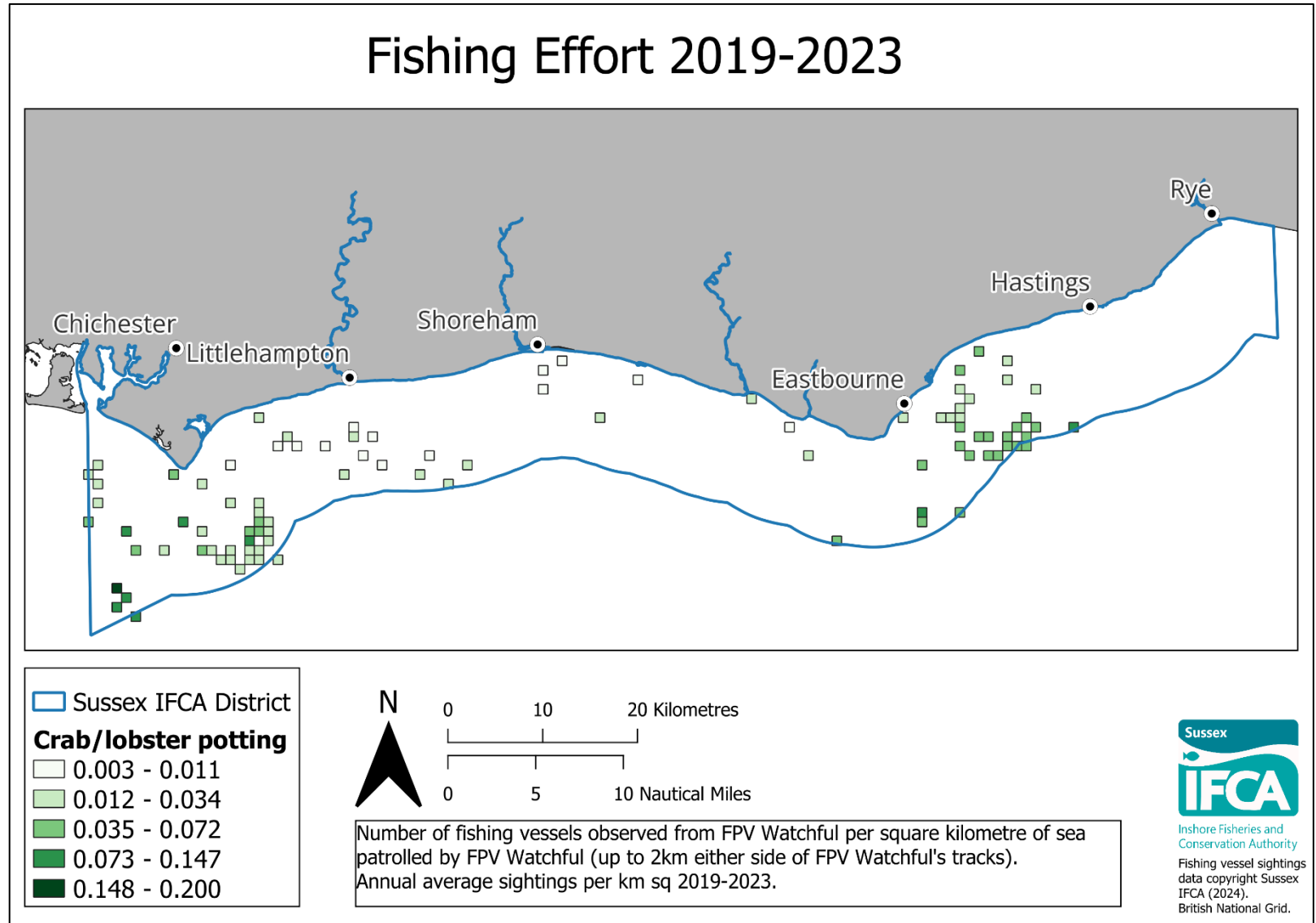


## Potting – lobster and crab

Parlour or inkwell pots were used to catch edible lobsters and crabs. Crabs were the 4<sup>th</sup> highest value species landed to Sussex ports and lobsters, the 11<sup>th</sup> highest between the years of 2019 and 2023.

The maximum fishing effort was 0.2 vessels per km<sup>2</sup> and fishing vessels were observed in 94 grid cells.

Fishing effort occurred between Selsey – Littlehampton and Shoreham – Hastings, usually associated with the rocky reef habitats that these species prefer.

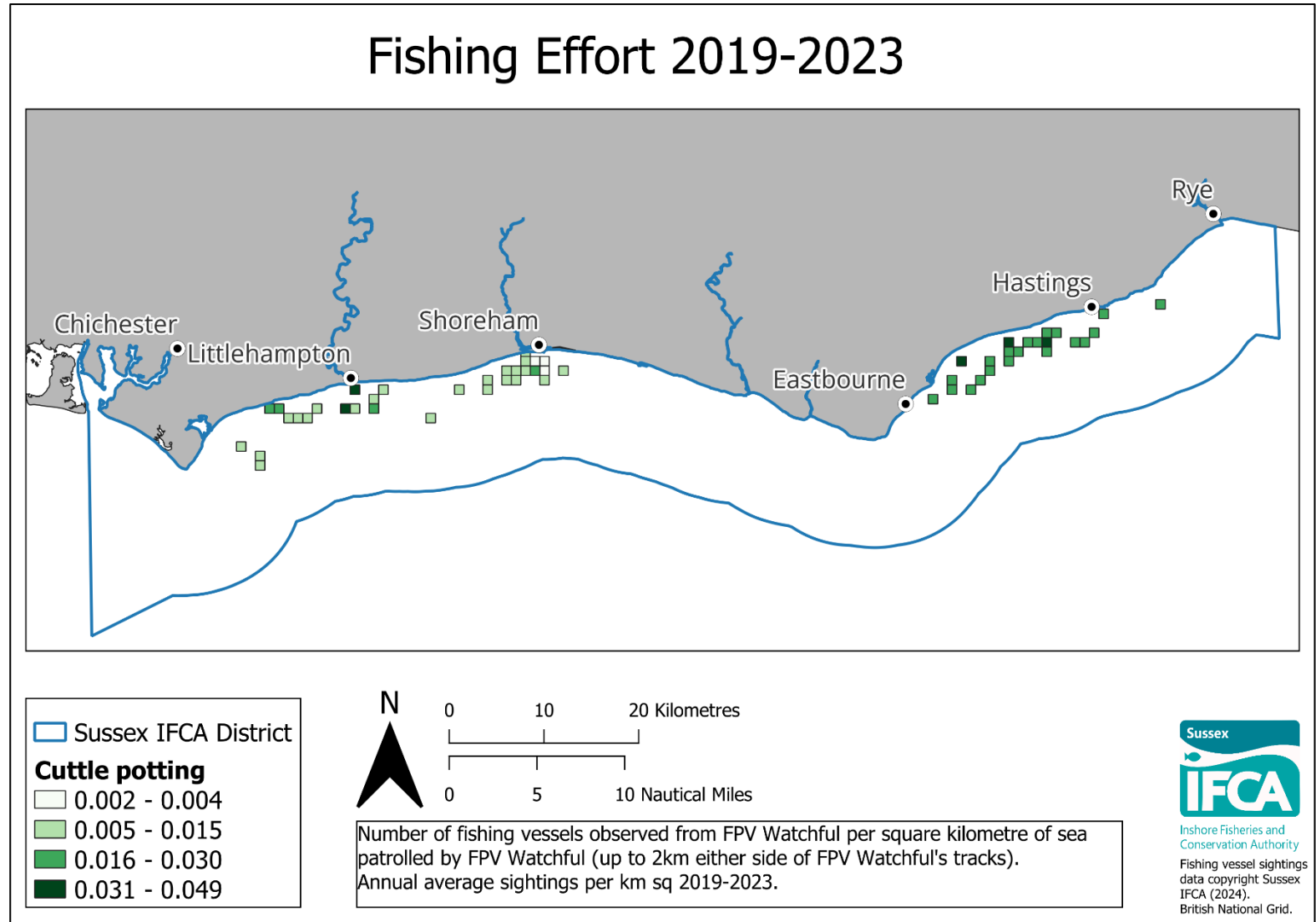


## Potting - cuttlefish

Potting for cuttlefish occurs in the spring when they come inshore to breed and then die at the end of their two-year lifespan. Cuttlefish were the 5<sup>th</sup> highest value species landed to Sussex ports between 2019 and 2023.

The maximum fishing effort was 0.049 vessels per km<sup>2</sup> and fishing vessels were observed in 55 grid cells.

Fishing effort occurred Selsey – Brighton and Eastbourne – Hastings.

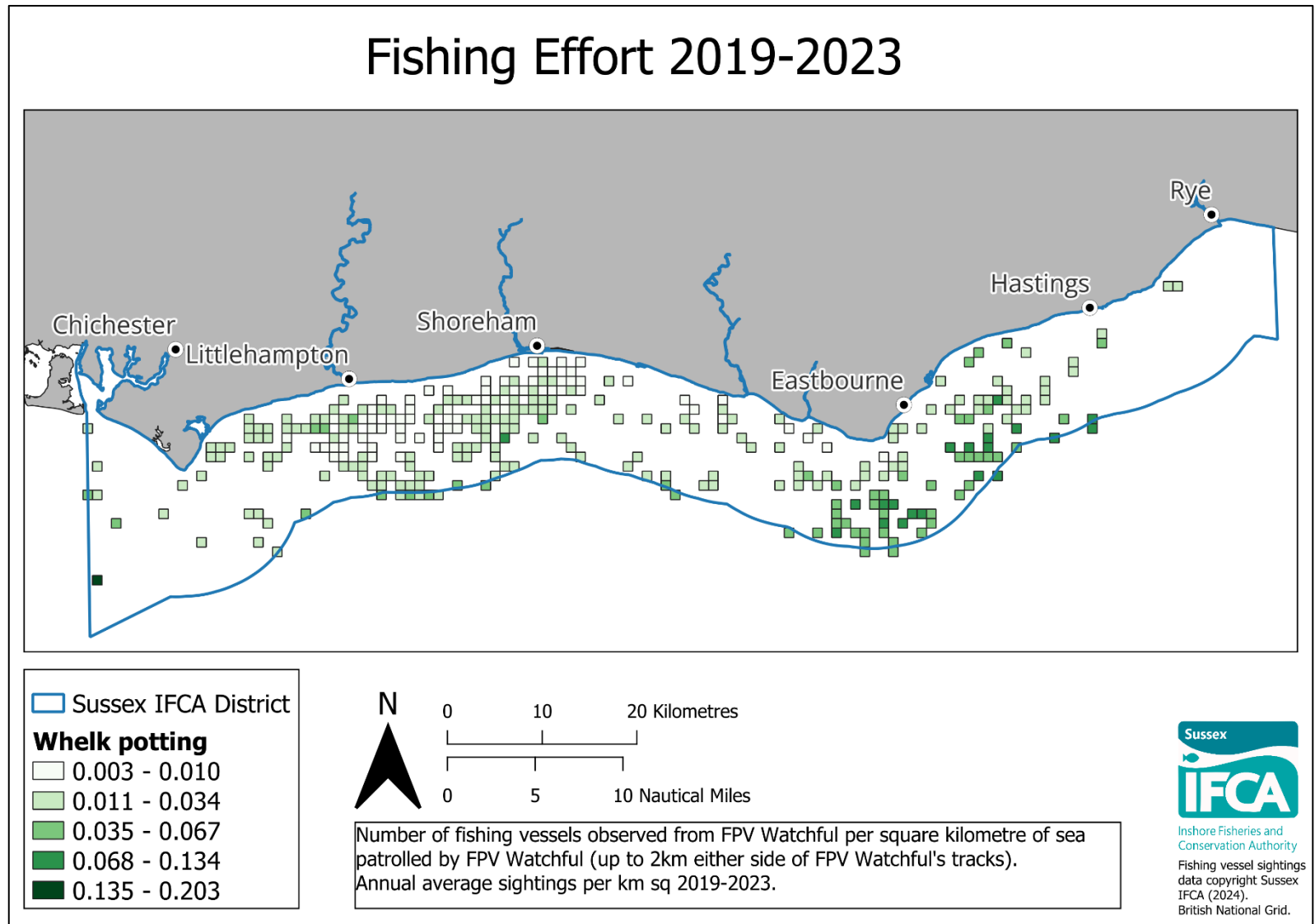


## Potting - whelk

Whelks are marine snails which hunt and scavenge around mixed sediment type seabed habitats. They were the second highest landed species by weight and value within Sussex ports between 2019 and 2023.

The maximum fishing effort was 0.203 vessels per km<sup>2</sup> and fishing vessels were observed in 321 grid cells.

Fishing effort occurred across the district, mainly Selsey–Brighton and Newhaven – Hastings.

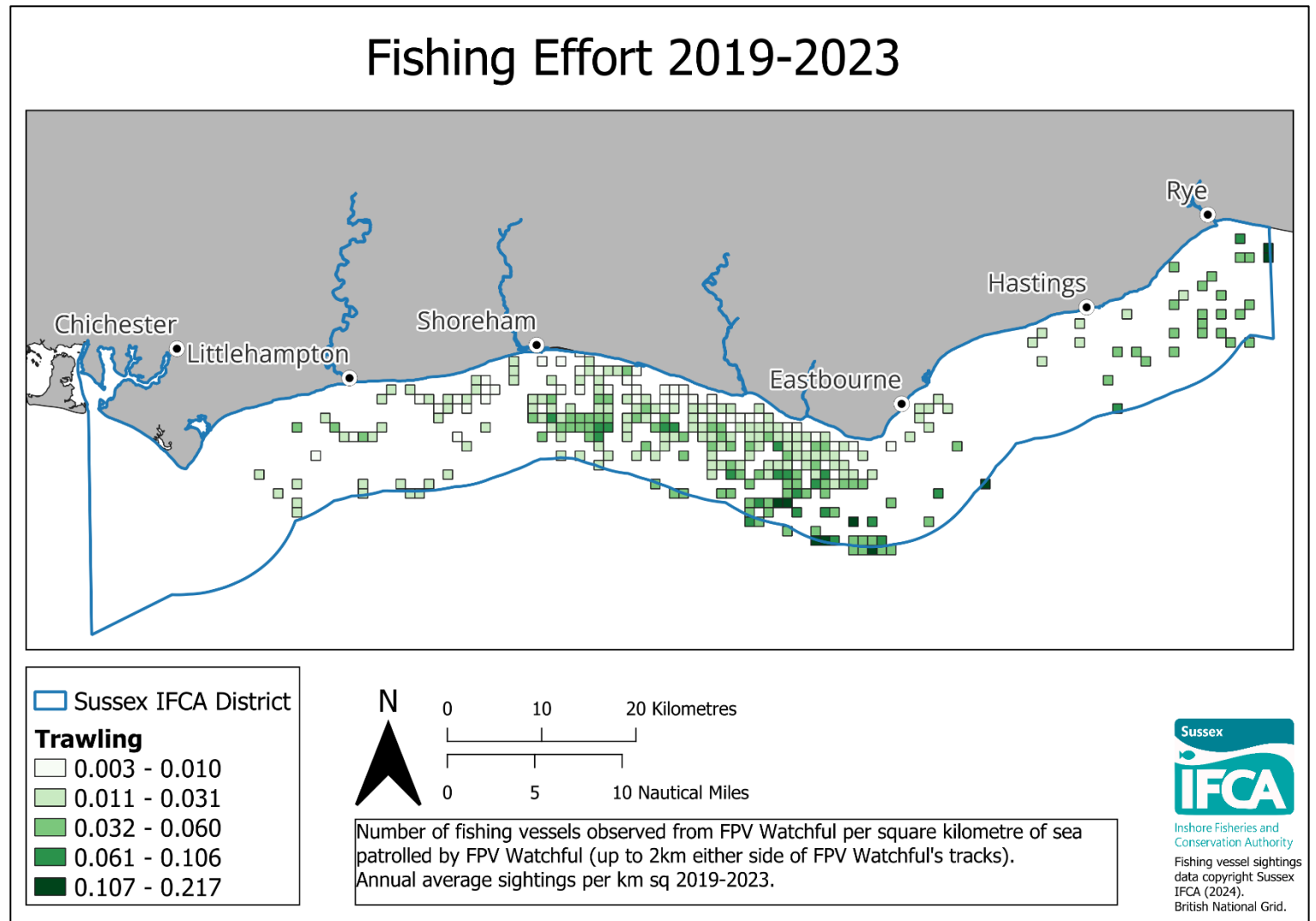


## Trawling (beam, stern and pair)

Trawling was recorded as either beam, stern, or pair methods and involved the fishing vessel towing a net behind it. Since 2019, the Nearshore Trawling Byelaw prohibits trawling over 304 km<sup>2</sup> of the nearshore area off Sussex, and at its furthest extends 4km from mean high water springs.

The maximum fishing effort was 0.217 vessels per km<sup>2</sup>. Fishing vessels were observed in 305 grid cells.

Fishing effort occurred between Selsey and Eastbourne, as well as between Hastings and Rye Bay.

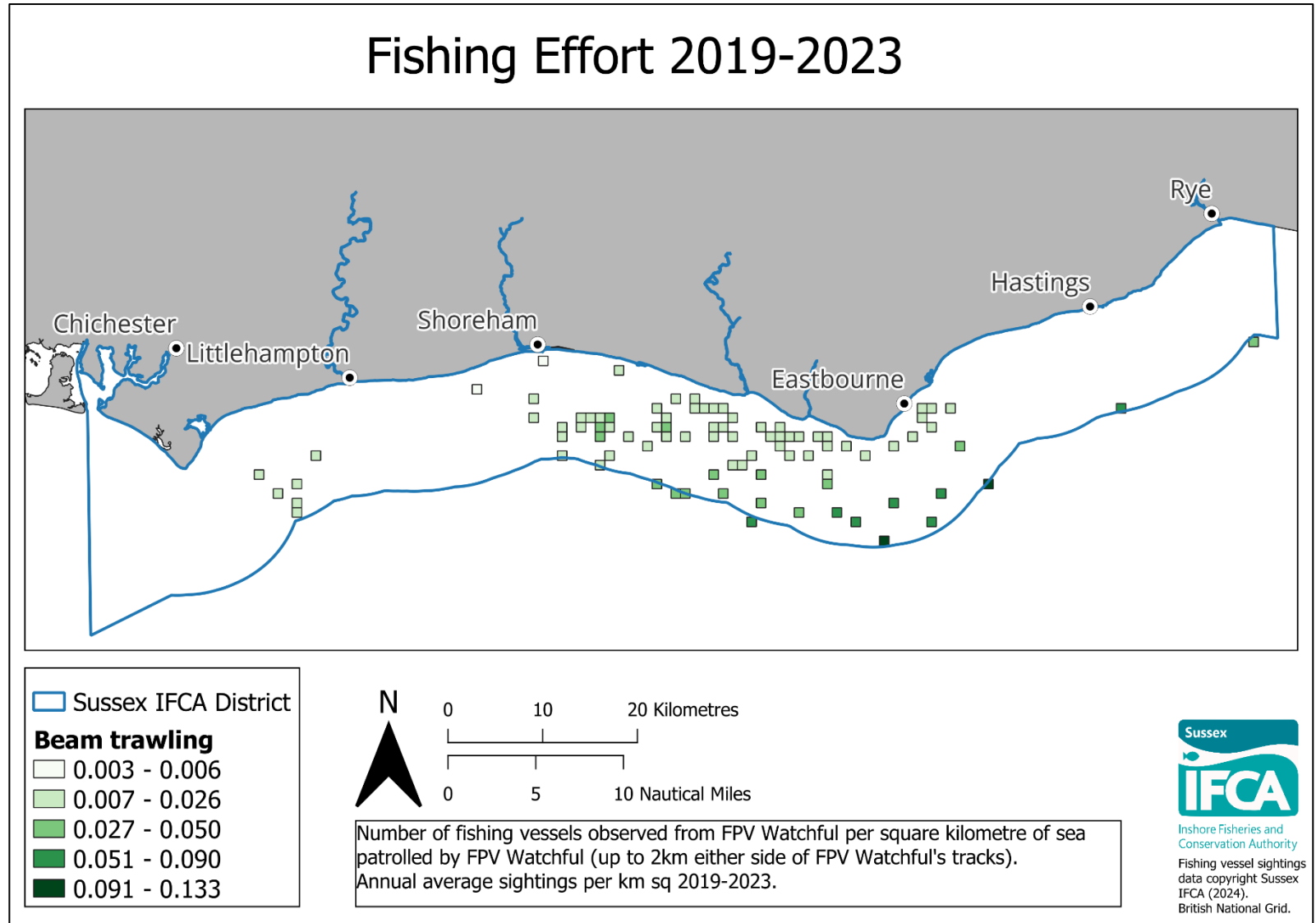


## Trawling - beam

A beam trawl has a horizontal bar or beam which holds the front of the net open and is attached to runners which sit on the seabed.

The maximum fishing effort was 0.133 vessels per km<sup>2</sup> and fishing vessels were observed in 88 grid cells.

Most fishing effort occurred between Shoreham and Eastbourne but was also observed between Pagham and Littlehampton.



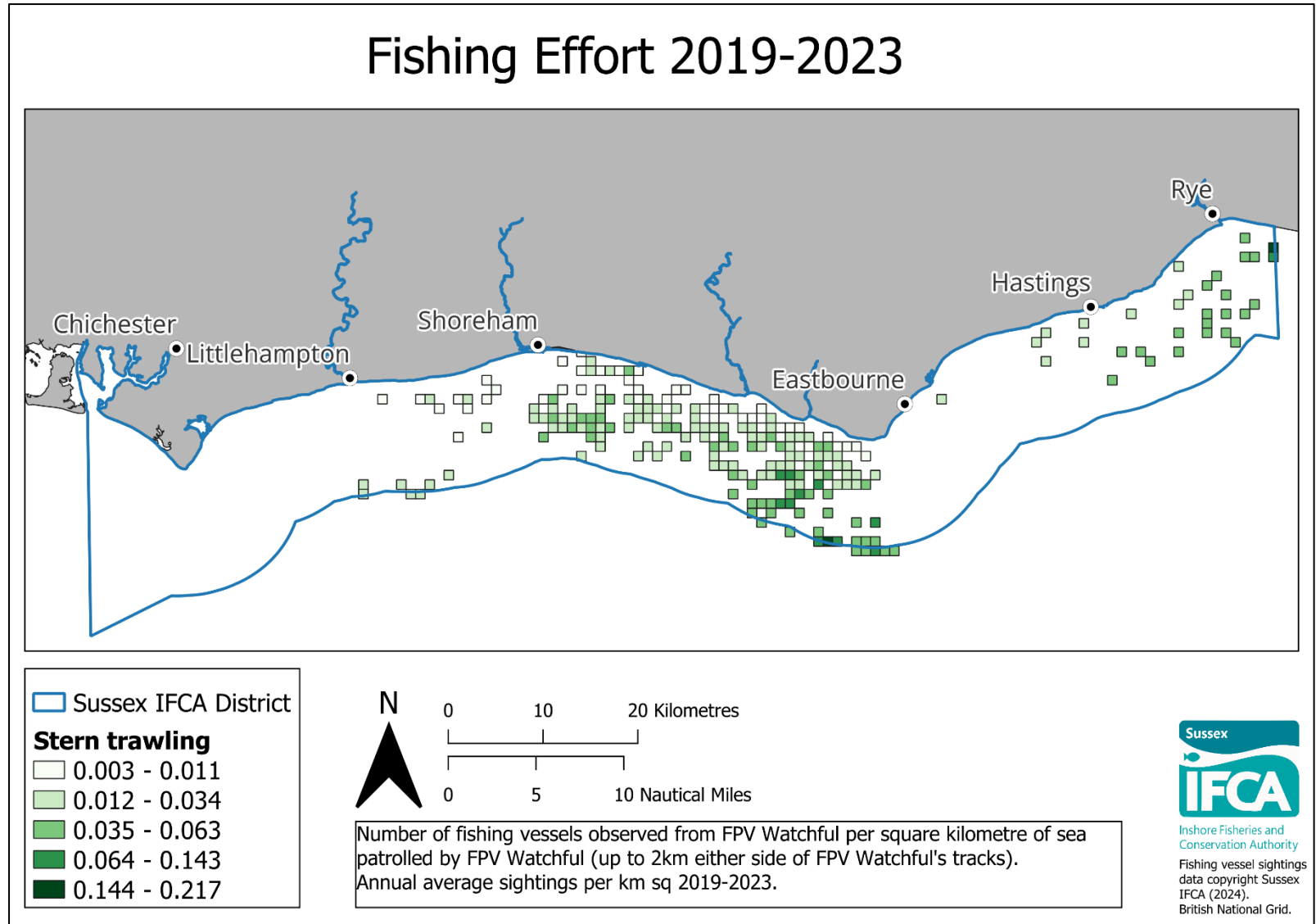


## Trawling - stern

Stern trawling is a generic method for towing a net from the stern (rear) of the fishing vessel.

The maximum fishing effort was 0.217 vessels per km<sup>2</sup>. Fishing vessels were observed in 231 grid cells.

Fishing effort occurred between Littlehampton and Eastbourne, with some vessels operating between Hastings and Rye.



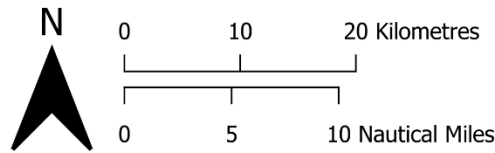
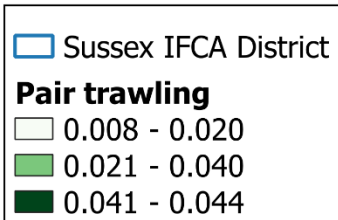
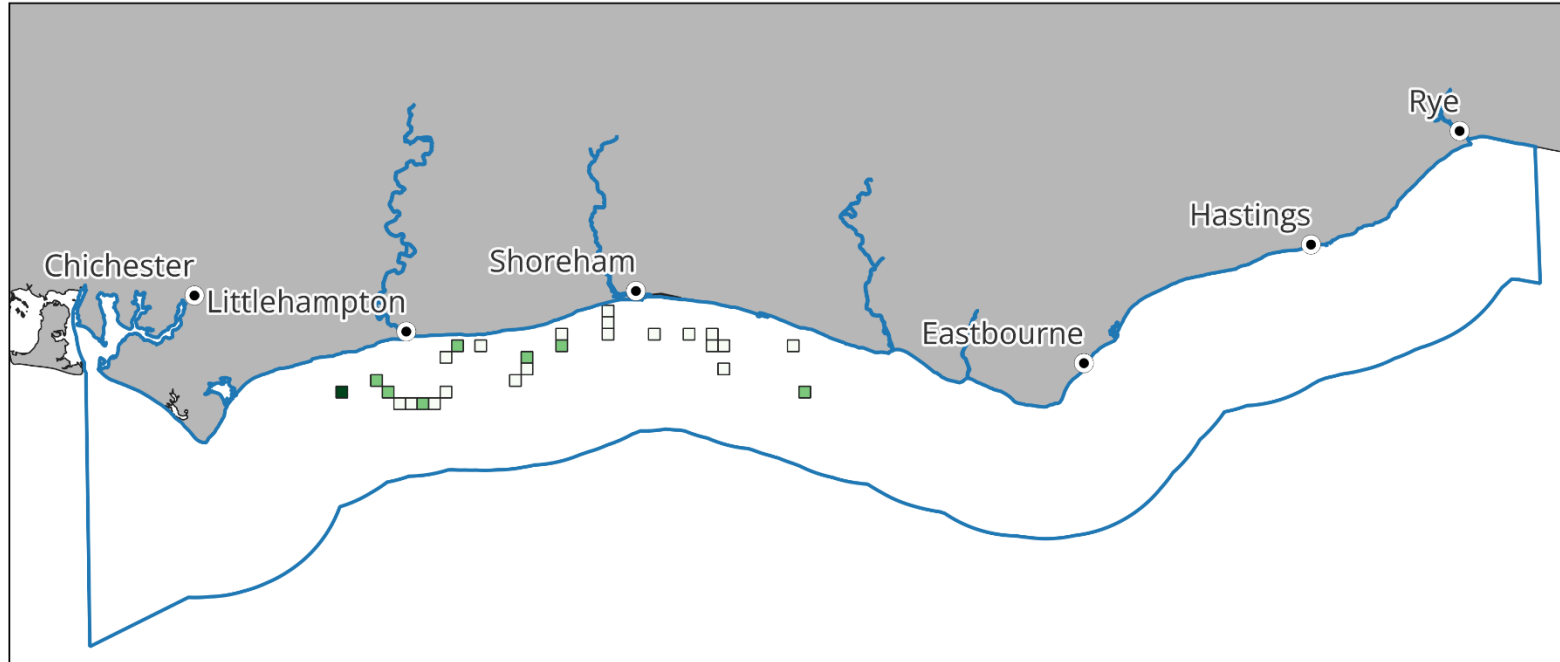
## Trawling - pair

Pair trawling involves two fishing vessels towing a net between them. In Sussex, most pair trawling occurred in the Spring and targeted black seabream, bass, and grey mullet.

The maximum fishing effort was 0.044 vessels per km<sup>2</sup>. Fishing vessels were observed in 27 grid cells.

Fishing effort occurred between Selsey and Newhaven.

## Fishing Effort 2019-2023



Number of fishing vessels observed from FPV Watchful per square kilometre of sea patrolled by FPV Watchful (up to 2km either side of FPV Watchful's tracks). Annual average sightings per km sq 2019-2023.



Inshore Fisheries and Conservation Authority  
 Fishing vessel sightings data copyright Sussex IFCA (2024).  
 British National Grid.

## Conclusion

Vessels over 12m long are required to have a vessel monitoring system (VMS) which transmits their position when at sea. The majority of the inshore fishing fleet is made up of vessels less than 12m long and there is, therefore, a data gap in the fishing effort of these vessels. Observations from fisheries patrol vessels has proved to be a useful method in filling this information gap, necessary for successful management of the fisheries and marine environment. This method was developed by CEFAS and further developed by Sussex IFCA, with the assistance of Sussex Biodiversity Records Centre.

These effort grids have been particularly useful in the development of management for Marine Conservation Zones, helping to ensure a balance between a viable fishing industry and the protection of sensitive features, meeting the objectives of the Conservation Advice. The maps have also been useful in illustrating the extent and nature of Sussex fishing fleets. Data will continue to be collected by fisheries officers on patrols at sea, and the data will continue to be analysed and used in managing the fisheries and marine environment in Sussex coastal waters.

