

Title Page

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Ecological connectivity of the marine protected area network in the Baltic Sea, Kattegat and Skagerrak: current knowledge and management needs

Authors: Charlotte Berkström, Lovisa Wennerström, and Ulf Bergström

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Author Contact details

Charlotte Berkström

Address: Department of Aquatic Resources, Swedish University of Agricultural Sciences, Institute of Coastal Research, Skolgatan 6, SE 742 42 Öregrund, Sweden

e-mail: charlotte.berkstrom@slu.se

Phone: + 46 10 4784165

Lovisa Wennerström

Address: Department of Aquatic Resources, Swedish University of Agricultural Sciences, Institute of Coastal Research, Skolgatan 6, SE 742 42 Öregrund, Sweden

e-mail: lovisa.wennerstrom@slu.se

Ulf Bergström

Address: Department of Aquatic Resources, Swedish University of Agricultural Sciences, Institute of Coastal Research, Skolgatan 6, SE 742 42 Öregrund, Sweden

e-mail: ulf.bergstrom@slu.se

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Appendix S1

Search strings in Web of Science: (nov 2020)

Connectivity* coherence* marine protected area*
Connectivity* coherence* marine reserve*
Connectivity* coherence* marine spatial planning*
Connectivity* coherence* Baltic Sea*
Connectivity* coherence* Swedish west coast*
Connectivity* coherence* Skagerrak*
Connectivity* coherence* Kattegat*
Ecological coherence* marine protected area*
Ecological coherence* marine reserve*
Ecological coherence* marine spatial planning*
Ecological coherence* Baltic Sea*
Ecological coherence* Swedish west coast*
Ecological coherence* Skagerrak*
Ecological coherence* Kattegat*
Connectivity* Baltic Sea*
Connectivity* Swedish west coast*
Connectivity* Skagerrak*
Connectivity* Kattegat*
Dispersal* Baltic Sea*
Dispersal* Swedish west coast*
Dispersal* Skagerrak*
Dispersal* Kattegat*
Fish migration* Baltic Sea*
Fish migration* Swedish west coast*
Fish migration* Skagerrak*
Fish migration* Kattegat*
Home range* fish* Baltic Sea*
Home range* fish* Swedish west coast*
Home range* fish* Skagerrak*
Home range* fish* Kattegat*
Tagging* Baltic Sea*
Tagging* Swedish west coast*
Tagging* Skagerrak*
Tagging* Kattegat*
Nursery* Baltic Sea*
Nursery* Swedish west coast*
Nursery* Skagerrak*
Nursery* Kattegat*
Spawning migration* Baltic Sea*
Spawning migration* Swedish west coast*
Spawning migration* Skagerrak*
Spawning migration* Kattegat*
Fish* Swedish west coast*
Marine green infrastructure*
green infrastructure* Connectivity* aquatic*
green-blue infrastructure*

green infrastructure* connectivity* Europe*
ecological corridor* Baltic Sea*
ecological corridor * Skagerrak*
ecological corridor * Kattegat*

Table S1. References to all distance values per species in table 2. All references are from the Baltic Sea, Skagerrak and/or Kattegat unless stated otherwise.

Species	Common name	References on dispersal and movement measurements
<i>Abramis brama</i>	Freshwater bream	Aro (1989)
<i>Acipenser oxyrinchus</i>	Atlantic Sturgeon	Stakėnas & Pilinkovskij (2019)
<i>Ammodytes marinus</i>	Lesser sand-eel	Jiménez-Mena et al. (2020)
<i>Amphibalanus improvisus</i>	Bay barnacle	Corell et al. (2012)
<i>Anguilla anguilla</i>	European eel	Dannewitz et al. (2005), Bergström et al. (2007), Enbody et al. (2021) Fishbase.com
<i>Ascidia mentula</i>	Tunicate	Havenhand (1991)
<i>Ascophyllum nodosum</i>	Knotted wrack	Dudgeon et al. (2001) - from USA, Coyer et al. (2003) and references in paper
<i>Aurelia aurita</i>	Moon jellyfish	Moksnes et al. (2014b)
<i>Cancer pagurus</i>	Edible/Brown crab	Karlsson & Christiansen (1996) and references in paper – from Norway, Ungfors et al. (2007), Ungfors et al. (2009) and references in paper, Artfakta.se
<i>Carcinus maenas</i>	European shore crab	Moksnes et al. (2014a)
<i>Ciona intestinalis</i>	Vase tunicate	Hudson et al. (2020)
<i>Clupea harengus</i>	Atlantic herring	Weber (1975), Saulamo & Neuman (2002), Bekkevold et al. (2005), Jörgensen et al. (2005), Bergström et al. (2007), Gaggiotti et al. (2009), Larsson et al. (2010), Bekkevold et al. (2011), Corander et al. (2013), Teacher et al. (2013), Claussen et al. (2015) and references in paper, Bekkevold et al. (2016)
<i>Coregonus maraena</i>	Maraena whitefish	Lehtonen & Himberg (1992), Bergström et al. (2007), Olsson et al. (2012)
<i>Coregonus maraena</i>	Maraena whitefish	Aro (1989), Lehtonen & Himberg (1992), Bergström et al. (2007), Fishbase.com
<i>Coryphaenoides rupestris</i>	Roundnose grenadier	Delaval et al. (2018)
<i>Cottus gobio</i>	Bullhead	Corell et al. (2012)
<i>Ctenolabrus rupestris</i>	Goldsinny wrasse	Sayer (2001) – from UK
<i>Cyclopterus lumpus</i>	Lumpfish	Whittaker et al. (2018)
<i>Esox lucius</i>	Pike	Aro (1989), Karås & Lehtonen (1993), Laikre et al. (2005), Bergström et al. (2007), Bekkevold et al. (2015), Larsson et al. (2015), Tibblin et al. (2016), Wennerström et al. (2016), Jacobsen et al. (2017), Nordahl et al. (2019), Möller et al. (2021), Fishbase.com
<i>Fucus radicans</i>	Baltic bladderwrack	Coyer et al. (2003) and references in paper, Jonsson et al. (2018) and references in paper
<i>Fucus serratus</i>	Toothed/Serrated wrack	Coyer et al. (2003) and references in paper
<i>Fucus vesiculosus</i>	Bladderwrack	Coyer et al. (2003) and references in paper, Tatarenkov et al. (2007), Pereyra et al. (2013), Rothäusler et al. (2015), Jonsson et al. (2018) and references in paper

<i>Gadus morhua</i>	Atlantic cod	Baltic Sea: Saulamo & Neuman (2002), Nielsen et al. (2003), Nielsen et al. (2005), Bergström et al. (2007), Kijewska et al. (2011), Stroganov et al. (2013); Kattegatt/Skagerrak: Knutsen et al. (2003), Jorde et al. (2007), Øresland & André (2008), Knutsen et al. (2011), André et al. (2016), Barth et al. (2017), Spies et al. (2018), Svedäng et al. (2018), Fishbase.com
<i>Gasterosteus aculeatus</i>	Three-spined stickleback	DeFaveri et al. (2012), DeFaveri et al. (2013b), DeFaveri et al. (2013a), Guo et al. (2015)
<i>Gobius niger</i>	Black goby	Corell et al. (2012)
<i>Gymnocephalus cernuus</i>	Ruffe	Gutsch & Hoffman (2016)
<i>Hediste diversicolor</i>	Ragworm	Einfeldt et al. (2014)
<i>Homarus gammarus</i>	European Lobster	Moland et al. (2011b), Moland et al. (2011a), Huserbråten et al. (2013), Moland et al. (2013b), Moland et al. (2013a), Øresland & Ulmestrand (2013), Thorbjørnsen et al. (2018)
<i>Idotea balthica</i>	Baltic isopod	De Wit et al. (2020)
<i>Labrus bergylta</i>	Ballan wrasse	Villegas-Ríos (2013) - from Spain
<i>Leuciscus idus</i>	Ide	Rohtla et al. (2015)
<i>Liparis liparis</i>	Striped seasnail	Corell et al. (2012)
<i>Littorina fabalis</i>	Flat periwinkle	Erlandsson et al. (1998)
<i>Littorina littorea</i>	Common periwinkle	Johannesson et al. (1988)
<i>Littorina saxatilis</i>	Rough periwinkle	Janson et al. (1983), Johannesson & Johannesson (1995), Erlandsson et al. (1998), Panova et al. (2006)
<i>Lophelia pertusa</i>	Spider hazards	Dahl et al. (2012), Moksnes et al. (2014b)
<i>Lota lota</i>	Burbot	Aro (1989)
<i>Merluccius merluccius</i>	European hake	Westgaard et al. (2017)
<i>Modiolus modiolus</i>	Northern horse mussel	Johnson et al. (2008), www.marlin.ac.uk - From UK
<i>Mytilus edulis</i>	Blue mussel	Gilg et al. (2003), Corell et al. (2012), Larsson et al. (2016), Strelkov et al. (2017), Stuckas et al. (2017)
<i>Nerophis ophidion</i>	Straightnose pipefish	Corell et al. (2012)
<i>Ostrea edulis</i>	Flat oyster	Kinlan och Gaines (2003), Johnson et al. (2008)
<i>Perca fluviatilis</i>	European Perch	Karås (1996), Järv (2000), Bergström et al. (2007), Bergek & Björklund (2009), Olsson et al. (2011), Ahlbeck Bergendahl et al. (2017), Hansson et al. (2019), Artfakta.se
<i>Pholis gunnellus</i>	Rock gunnel	Corell et al. (2012)
<i>Platichthys flesus</i>	European flounder	Florin (2005), Hemmer-Hansen et al. (2007b), Hemmer-Hansen et al. (2007a), Florin & Höglund (2008), ICES (2010) and references in paper, Florin et al. (2013), Momigliano et al. (2017), Momigliano et al. (2018), Reis-Santos et al. (2018)
<i>Platichthys solemdali</i>	European flounder	Momigliano et al. (2017), Momigliano et al. (2018)

<i>Pleuronectes platessa</i>	European plaice	Aro (1989), Ulrich et al. (2017)
<i>Pomatoschistus minutus</i>	Sand goby	Larmuseau et al. (2010a), Larmuseau et al. (2010b), Corell et al. (2012),
<i>Pygospio elegans</i>	Polychaete	Corell et al. (2012)
<i>Ruppia maritima</i>	Beaked tasselweed	Triest & Sierens (2015), Triest et al. (2018)
<i>Ruppia spiralis</i>	Widgeongrass	Triest et al. (2018)
<i>Salmo salar</i>	Atlantic salmon	Jutila et al. (2003), Bergström et al. (2007), Palm et al. (2008), Pedersen et al. (2007), Tonteri et al. (2007), Palmé et al. (2012), Whitlock et al. (2018), Miettinen et al. (2021)
<i>Rutilus rutilus</i>	Roach	Hansson et al. (2019)
<i>Salmo trutta</i>	Sea trout	Kalio-Nyberg et al. (2002), Bergström et al. (2007), Degerman et al. (2012), Östergren et al. (2012), Östergren & Nilsson (2012), Jonsson & Jonsson (2014), Kalio-Nyberg et al. (2017)
<i>Sander lucioperca</i>	Pike-perch	Saulamo & Thoreson (2005), Bergström et al. (2007), Björklund et al. (2007), Säisä et al. (2010), Andersson et al. (2015), Ložys et al. (2017)
<i>Scomber scombrus</i>	Atlantic mackerel	Jansen et al. (2012)
<i>Scophthalmus maximus</i>	Turbot	Nielsen et al. (2004), Florin (2005), Bergström et al. (2007), ICES (2010) and references in paper, Florin & Höglund (2007), Florin et al. (2013)
<i>Skeletonema marioni</i>	Diatom	Sefbom et al. (2018)
<i>Solea solea</i>	Common sole	Symonds & Rogers (1995) – from UK, Cuveliers et al. (2012)
<i>Sprattus sprattus</i>	European sprat	Limborg et al. (2009)
<i>Symphodus melops</i>	Corkwing wrasse	Halvorsen et al. (2016), Faust et al. (2018), Mattingsdal et al. (2020)
<i>Zoarces viviparus</i>	Eelpout	Bergek et al. (2012), Kinitz et al. (2013)
<i>Zostera marina</i>	Eelgrass	Orth et al. (1994) - from USA, Reusch (2002), Källström et al. (2008), Jahnke et al. (2018) and references in paper, Triest et al. (2018) and references in paper
<i>Zostera noltii</i>	Dwarf eelgrass	Chust et al. (2013) - from Spain

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