

Supplement to *Long-term trends in reef fish populations in Bonaire Marine Park*

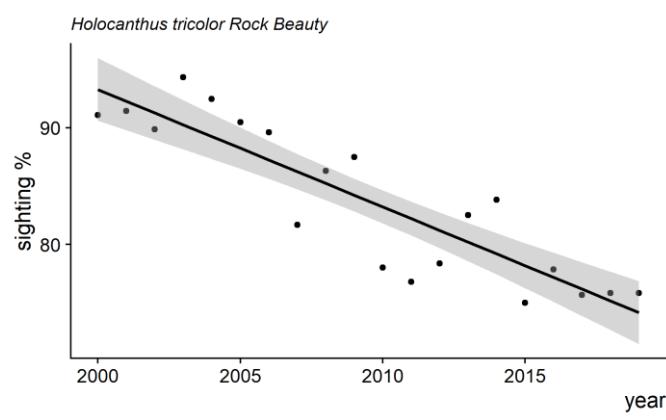
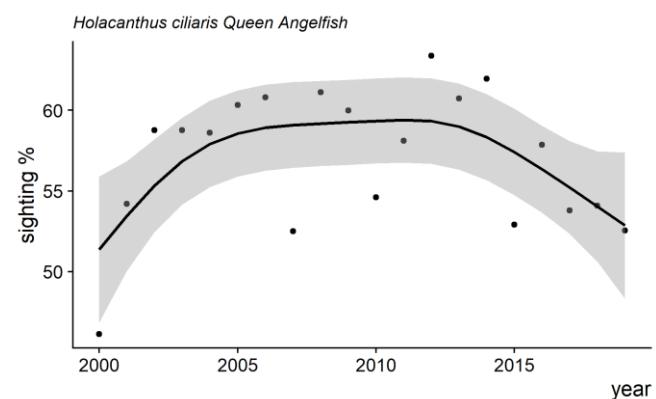
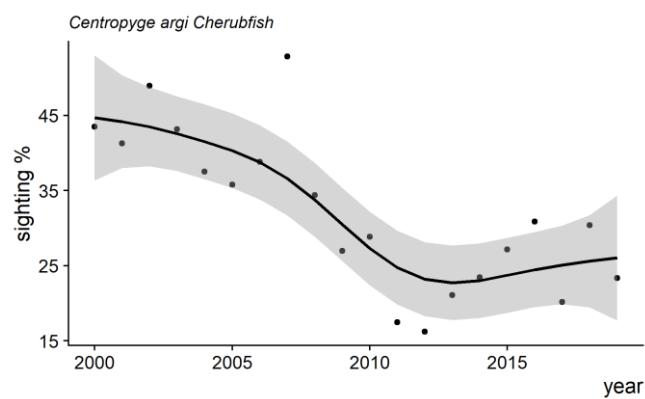
Sighting frequencies of individual reef fish species 2000-2019

Species with more than 10% sighting frequency in any year. Literature used on food sources:

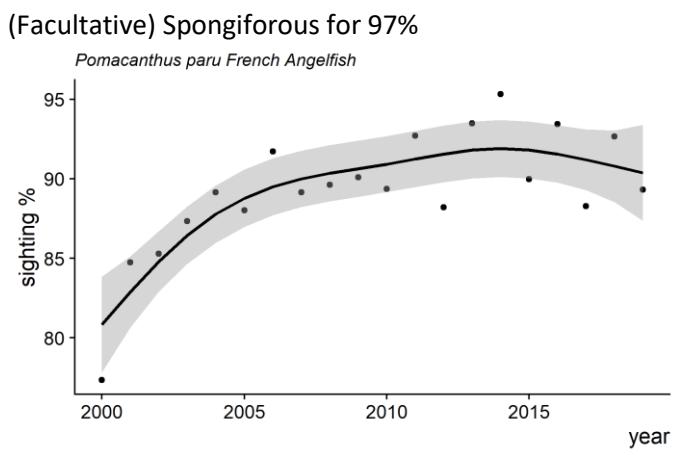
Facultative Spongivorous according to Randall and Hartman (1968), with percentages sponges in gut content, Facultative corallivorous according to Rotjan and Lewis (2008) and (Facultative) Piscivorous to Hixon (2015).

Bridled goby complex re-identified as *Coryphopterus venezuelae*, following Bennema and Van Moorsel (2022).

Pomacanthidae Angelfishes (Spongivorous)



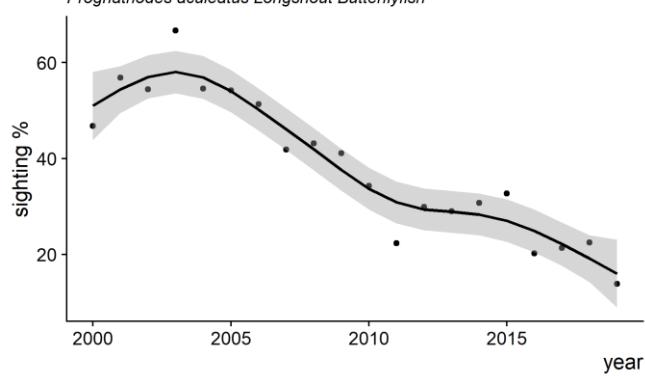
(Facultative) Spongivorous for 97%



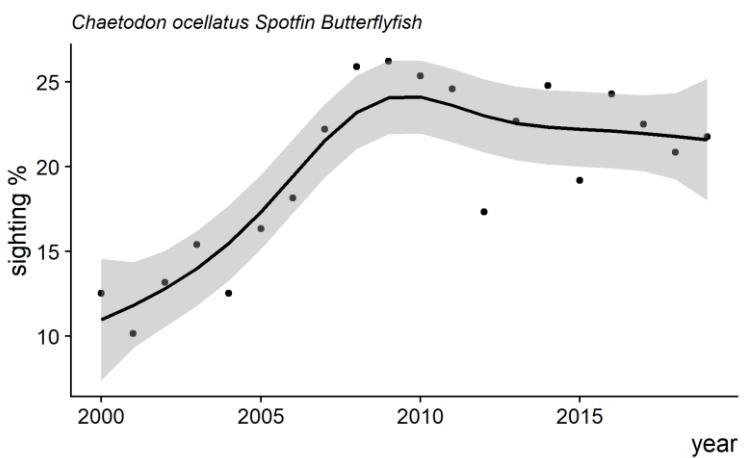
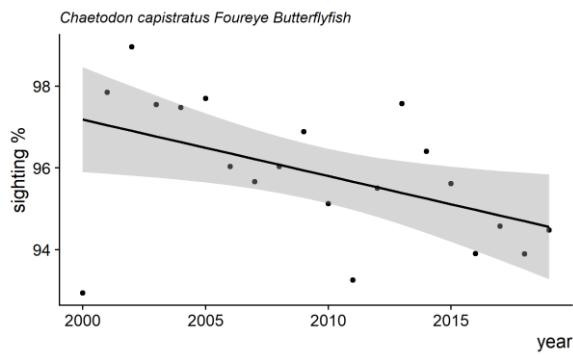
(Facultative) Spongivorous for 75%

Prognathidae Butterflyfishes

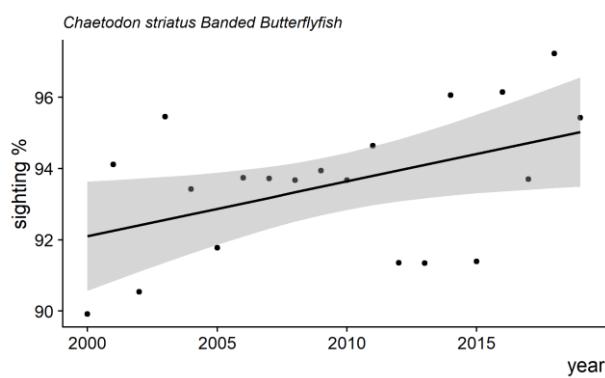
Prognathodes aculeatus Longsnout Butterflyfish



Chaetodontidae Butterflyfishes (Facultative corallivorous)



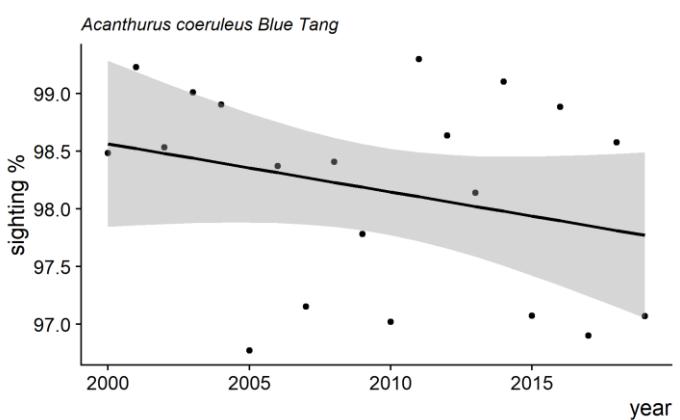
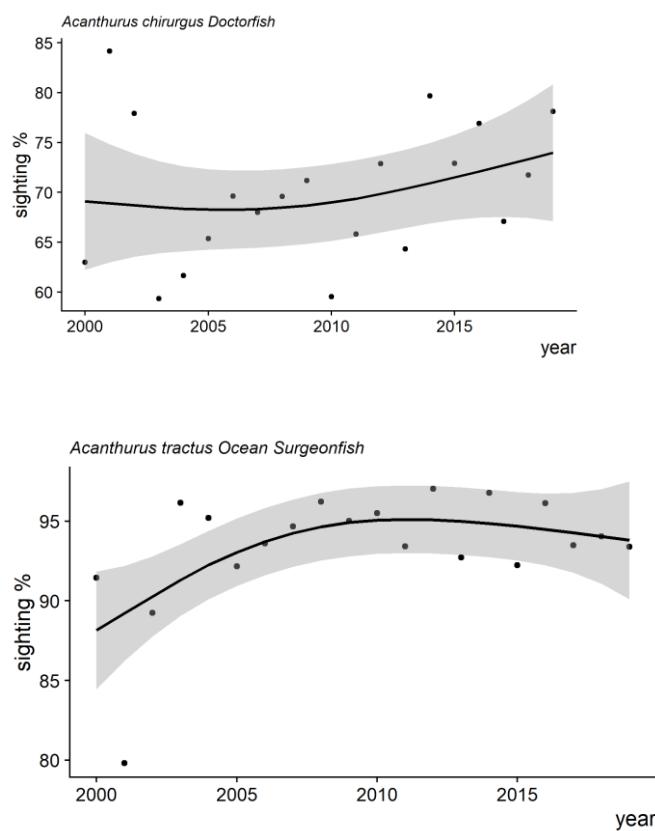
Facultative corallivorous



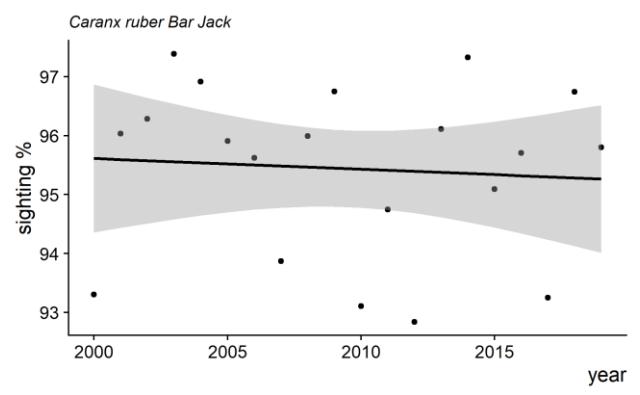
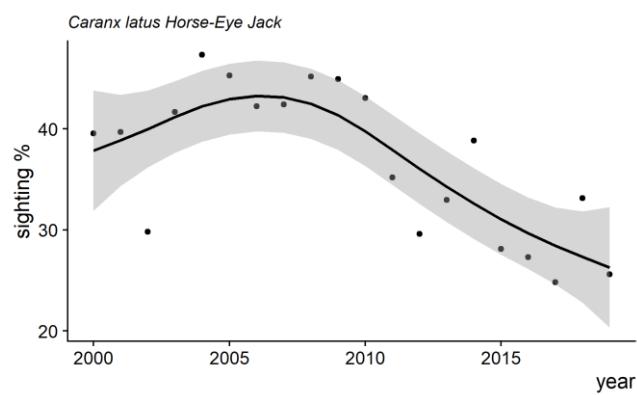
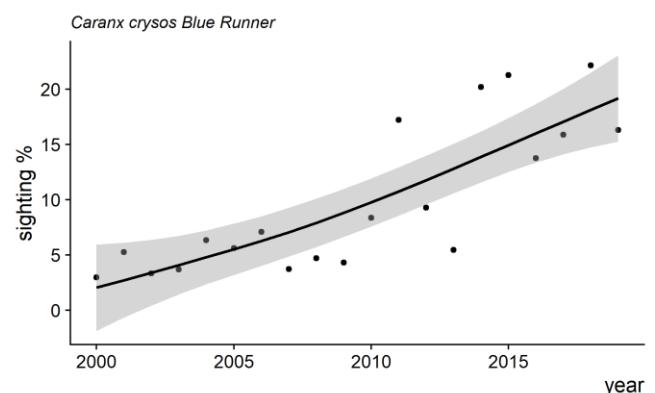
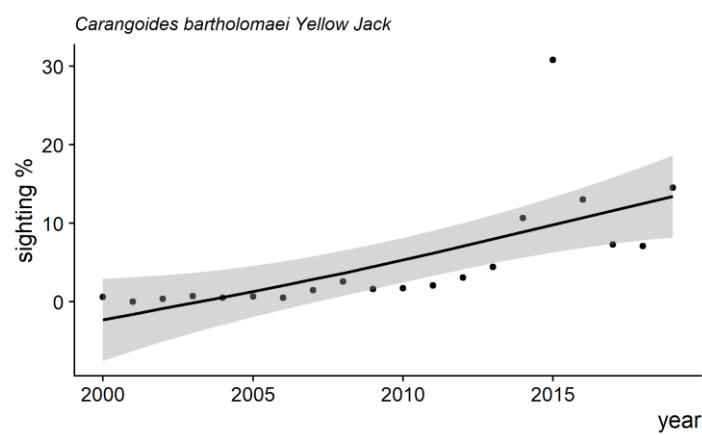
Facultative corallivorous

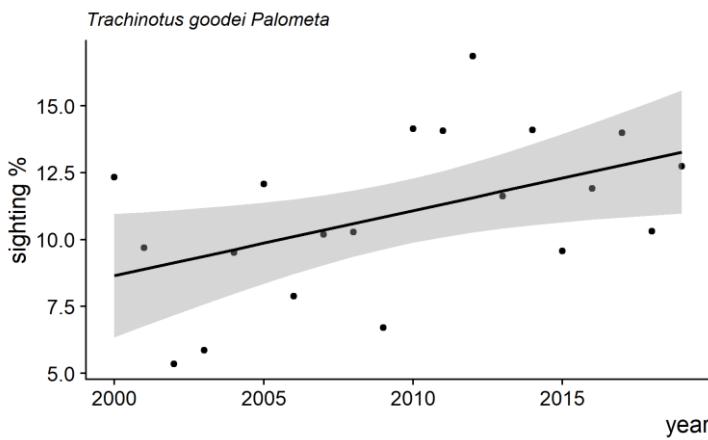
Facultative corallivorous

Acanthuridae Surgeonfishes (Herbivorous)

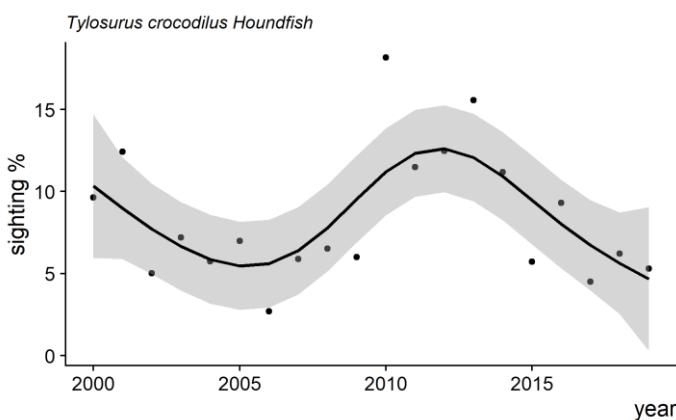


Carangidae Jacks (Piscivorous)

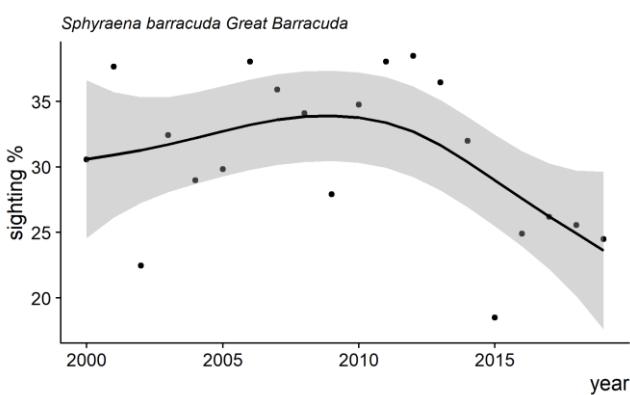




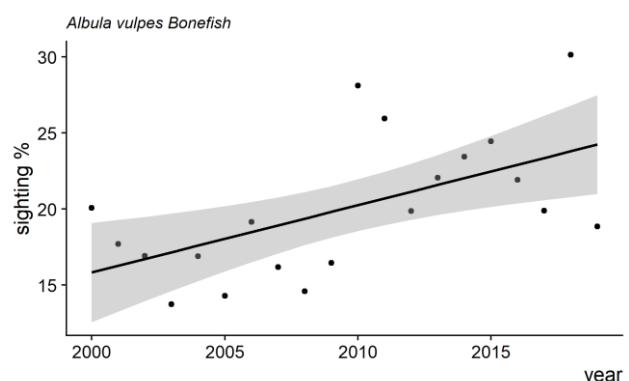
Belonidae Needlefishes



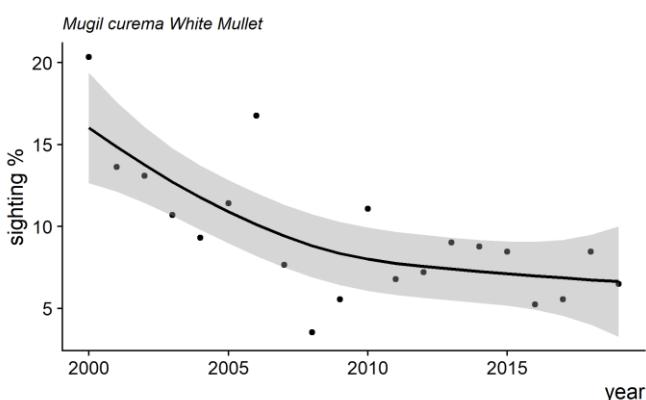
Sphyraenidae Barracudas



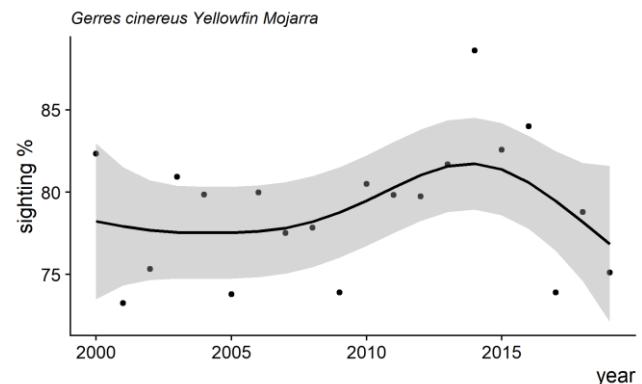
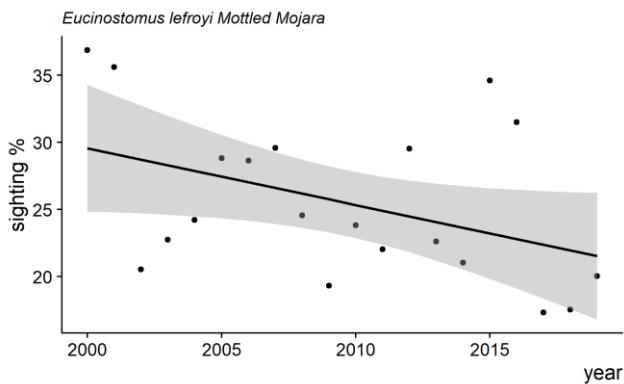
Albulidae Bonefishes



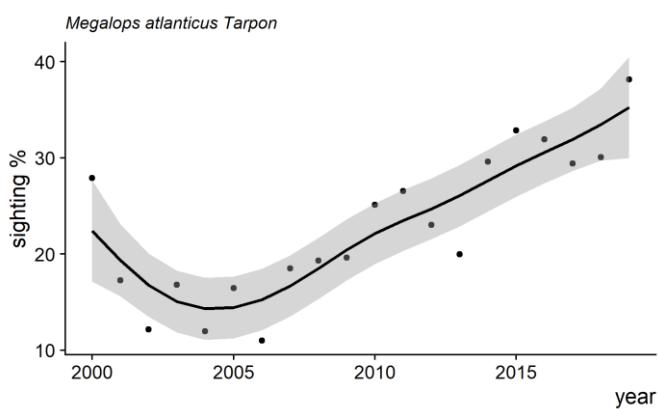
Mulgilidae Mullets



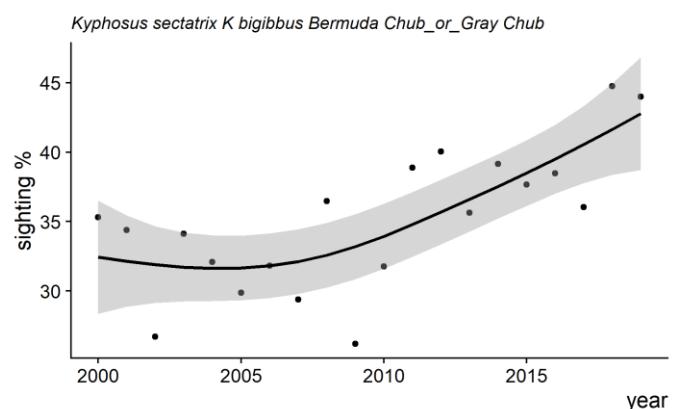
Gerreidae Mojarras



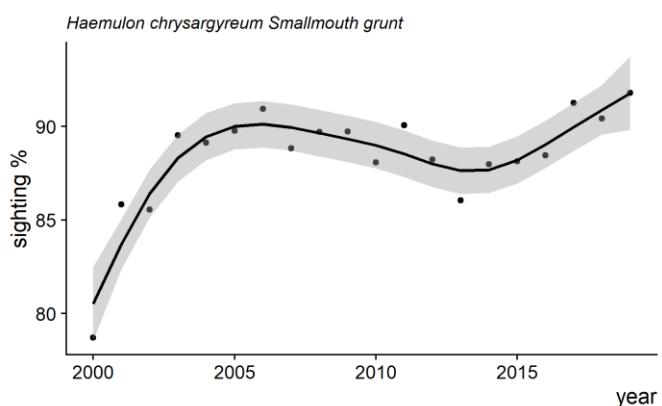
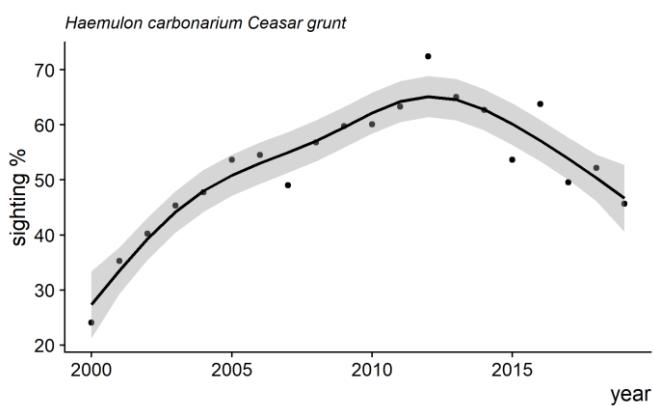
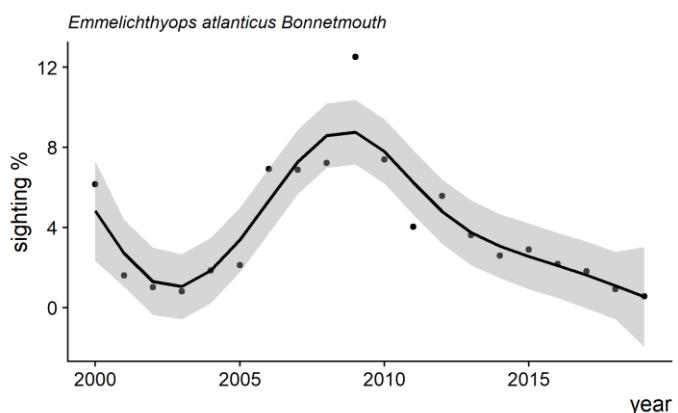
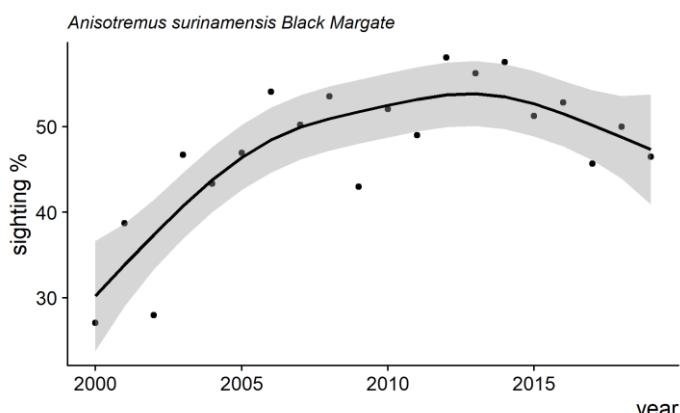
Megalopidae Tarpons

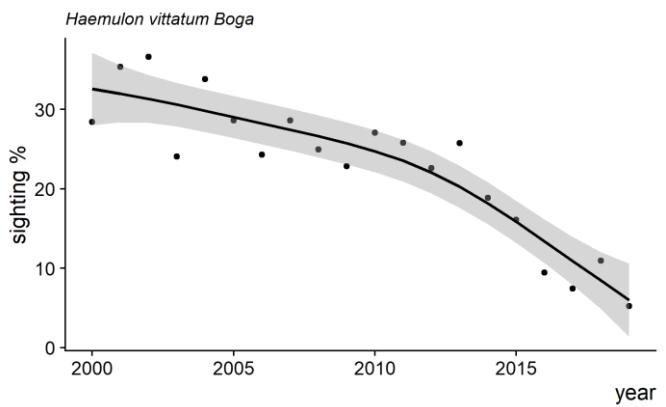
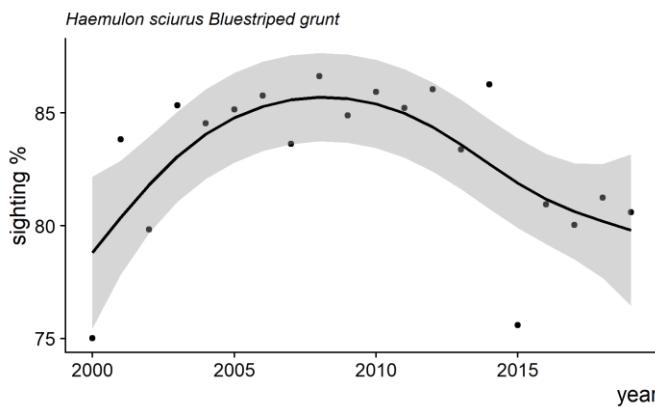
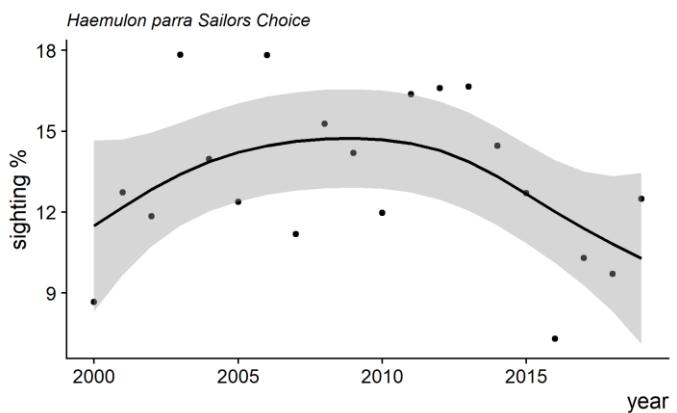
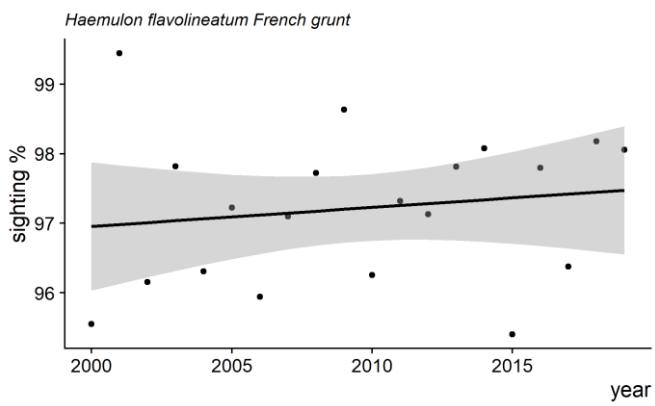


Kyphosidae Sea Chubs

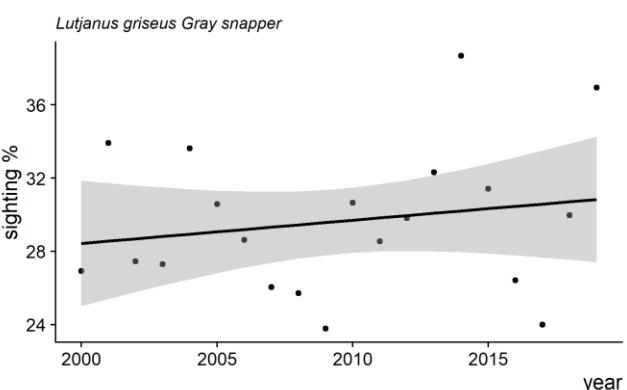
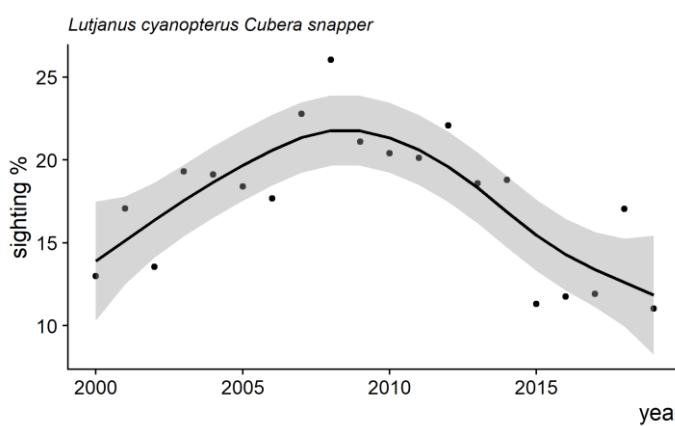
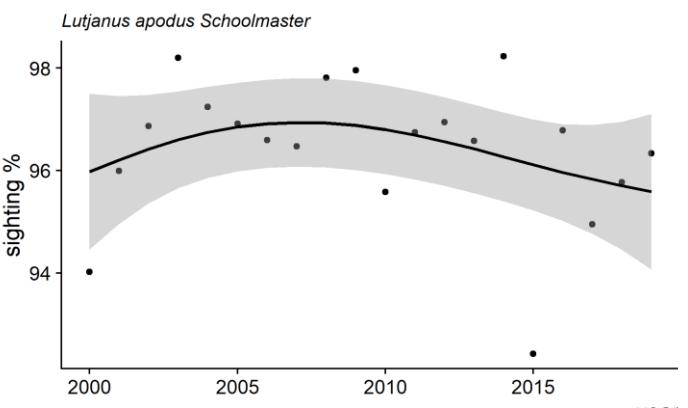
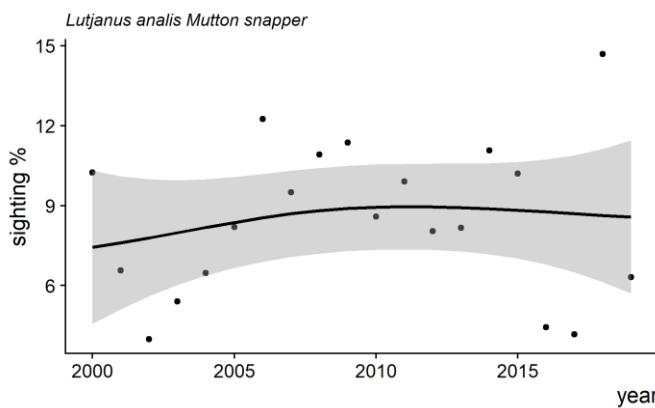


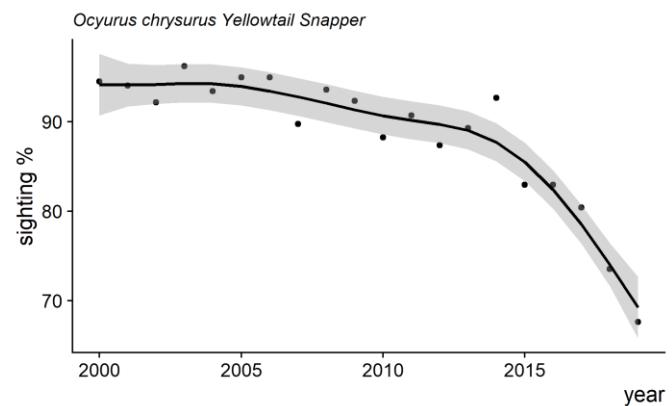
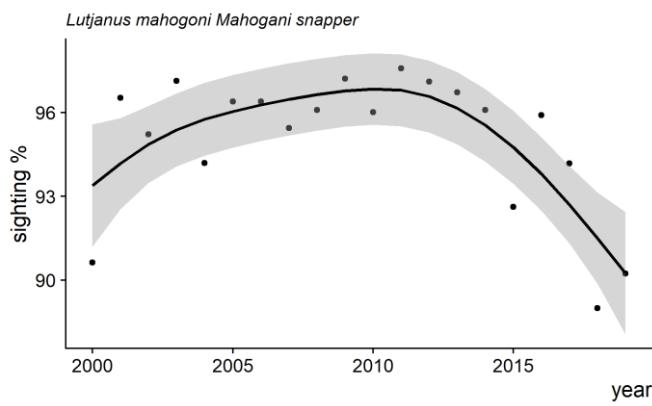
Haemulidae Grunts



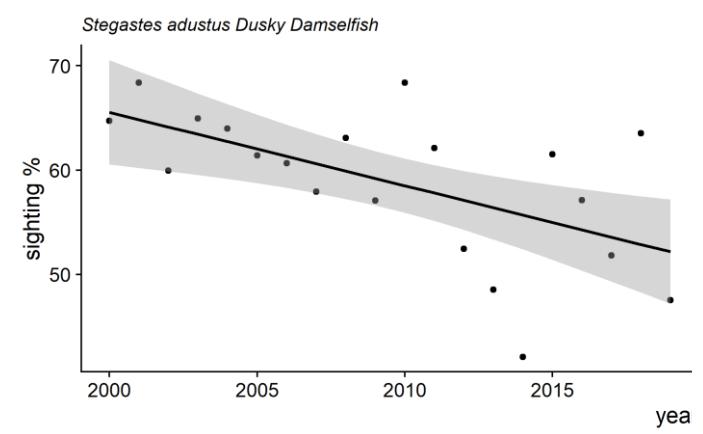
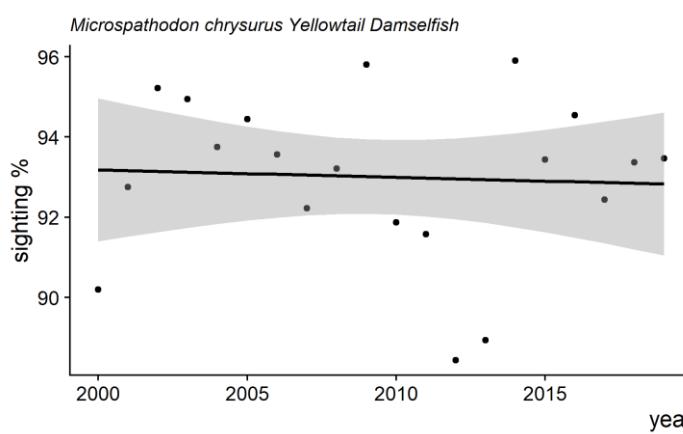
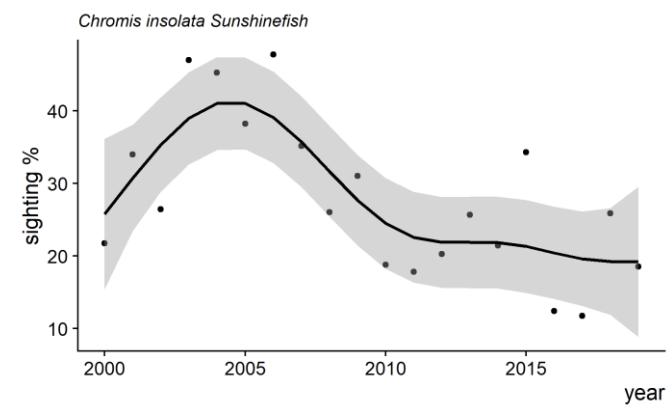
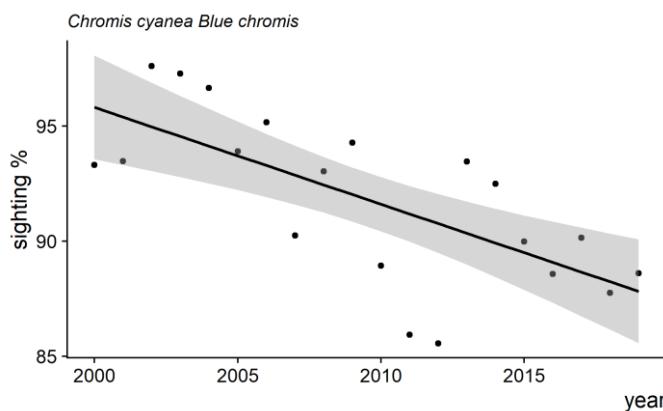
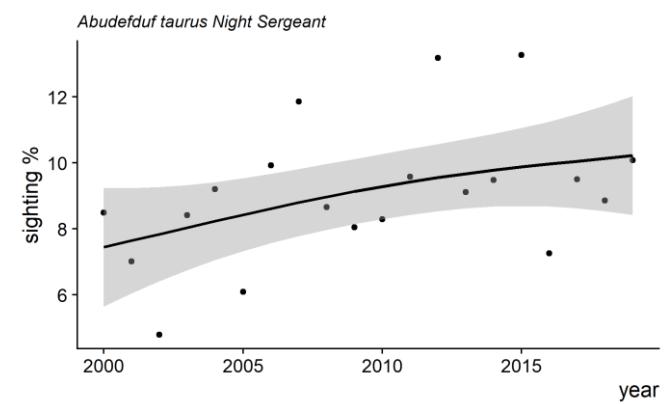
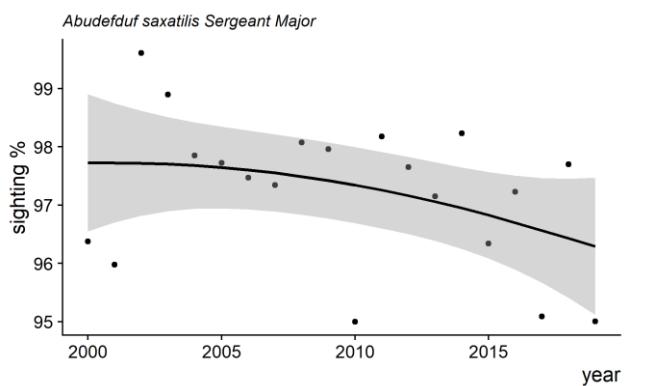


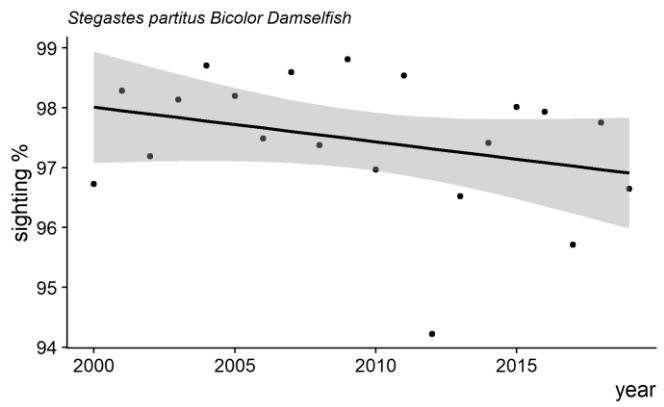
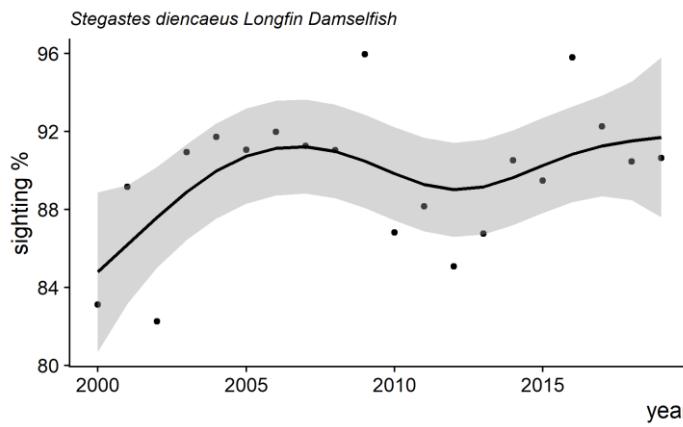
Lutjanidae Snappers (Piscivorous)



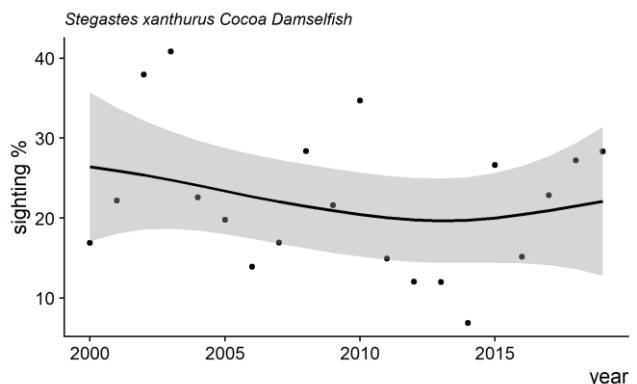
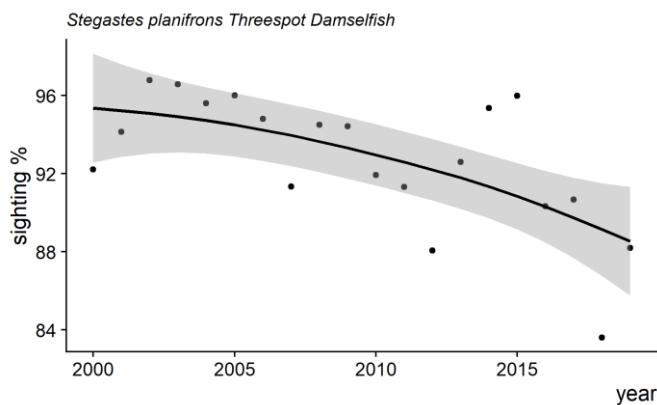


Pomacentridae Damselfishes



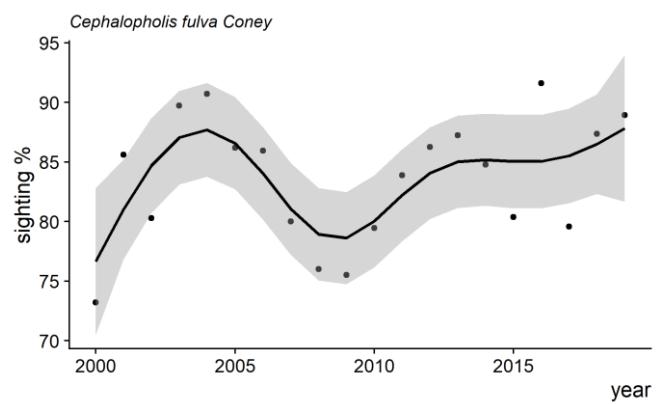
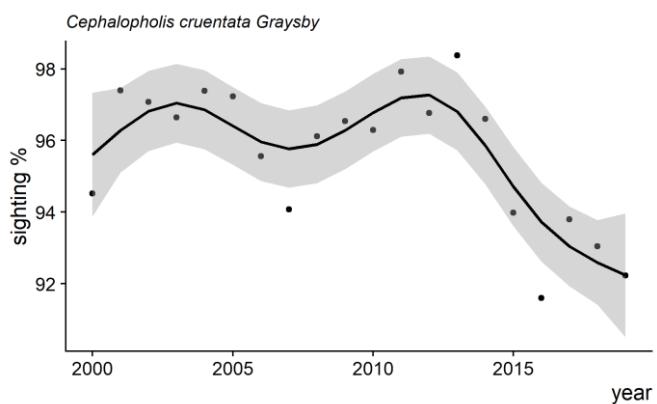


Protects algal garden

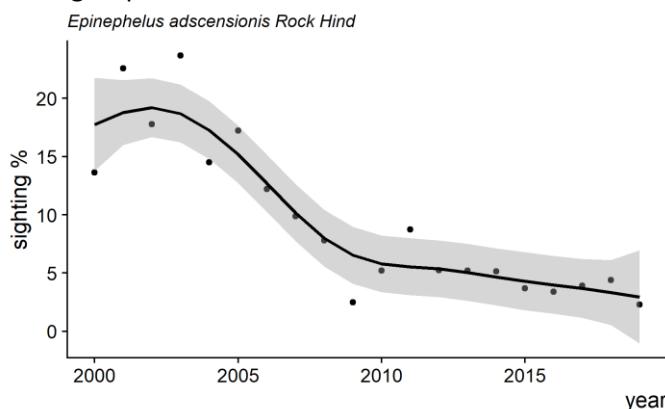


Protects algal garden

Serranidae Groupers (Piscivorous), Sea Basses and Hamlets

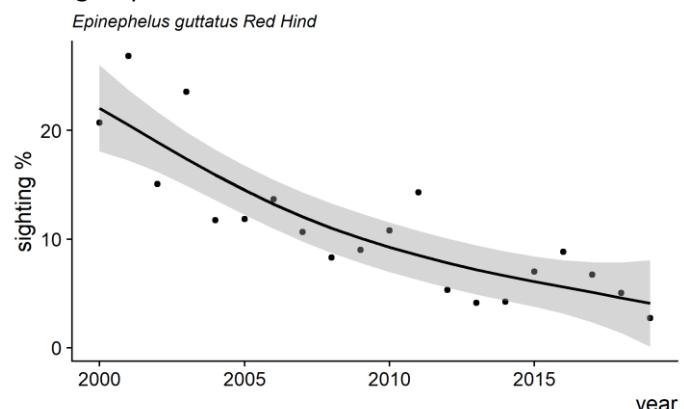


Small grouper

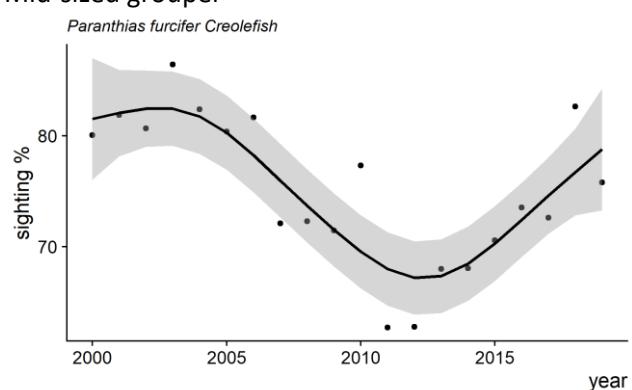
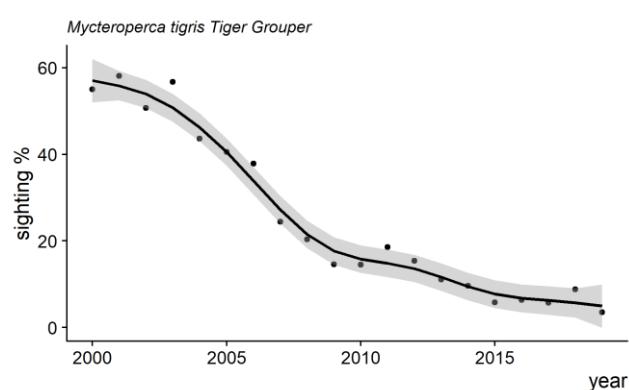
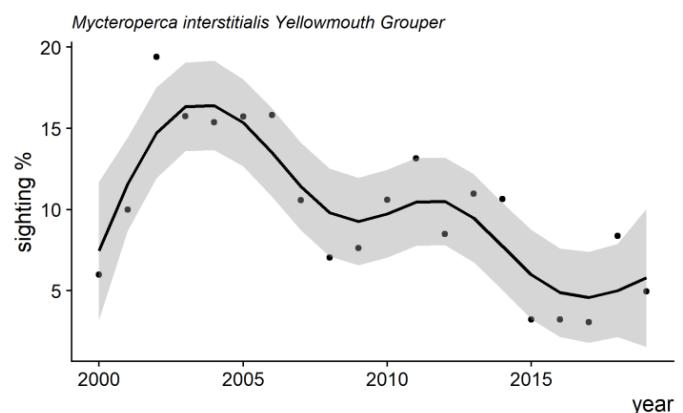
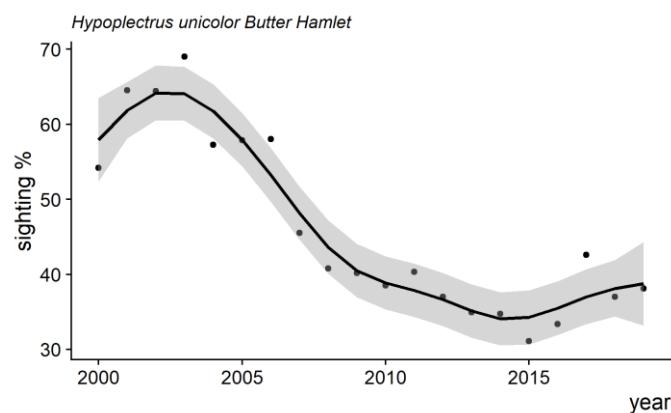
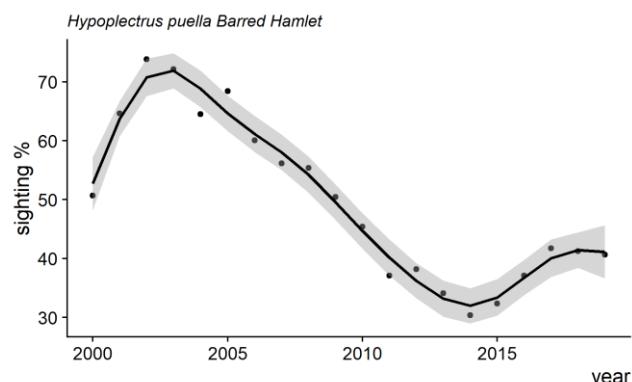
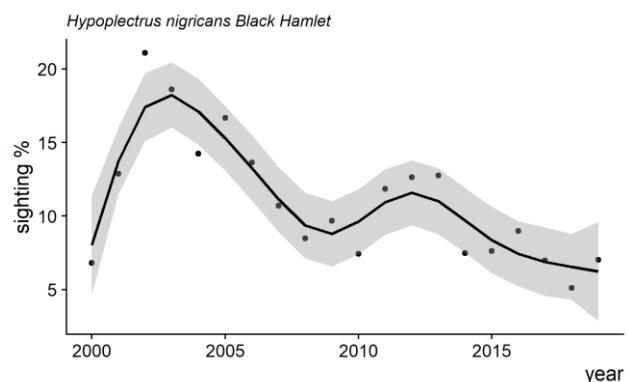
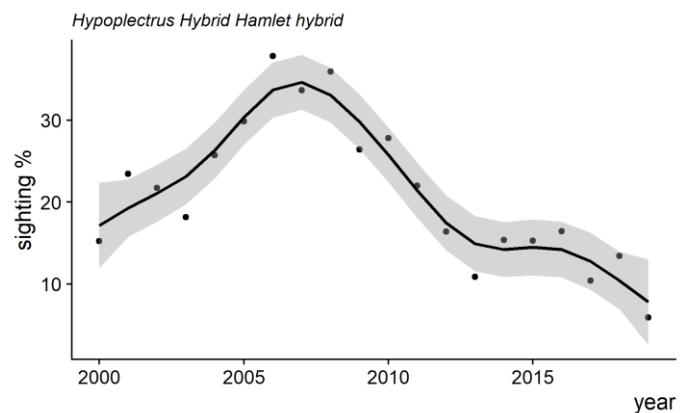
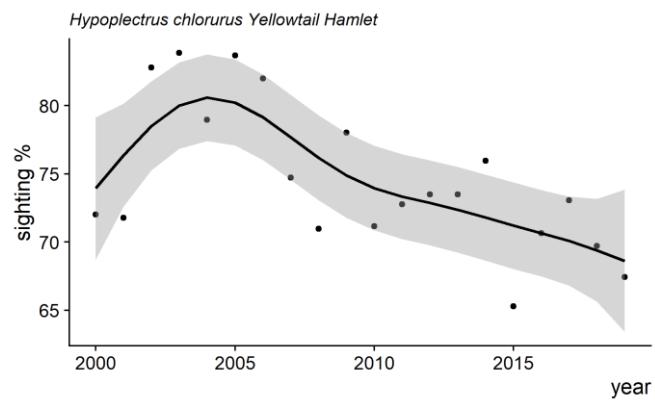


Mid-sized grouper

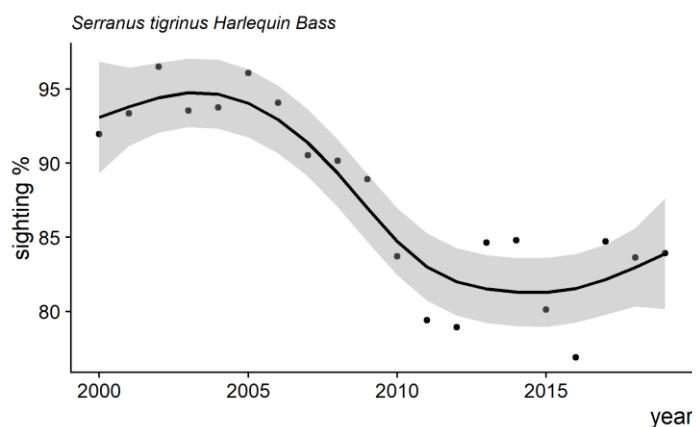
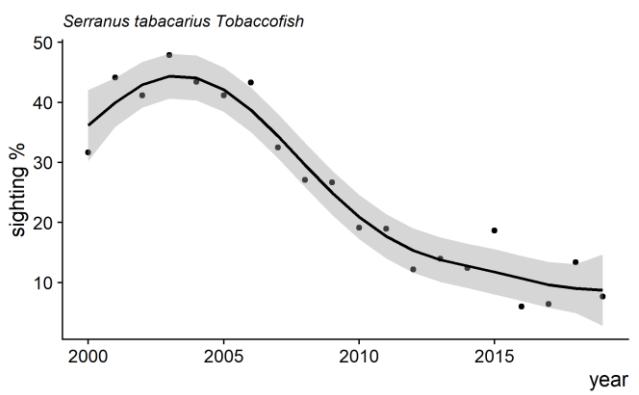
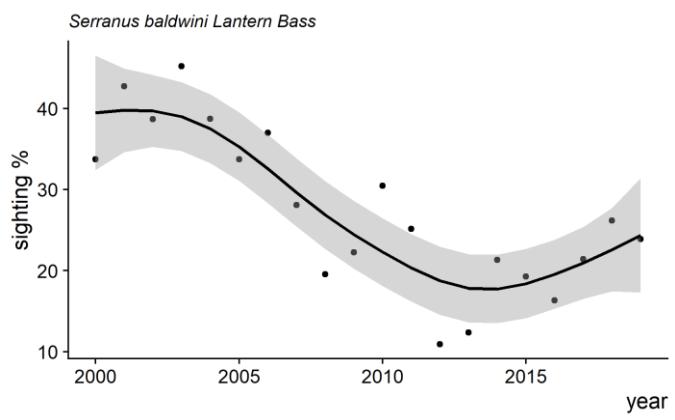
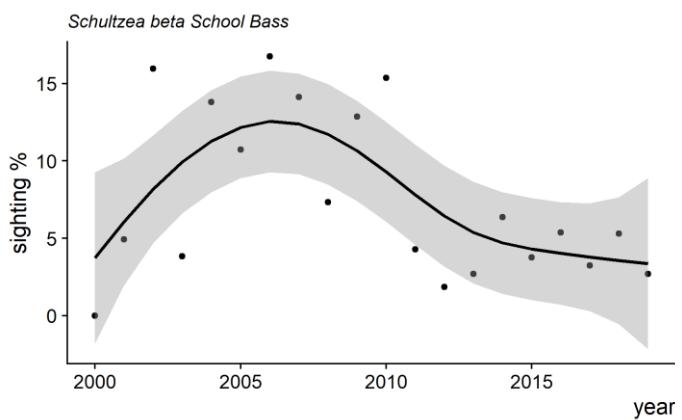
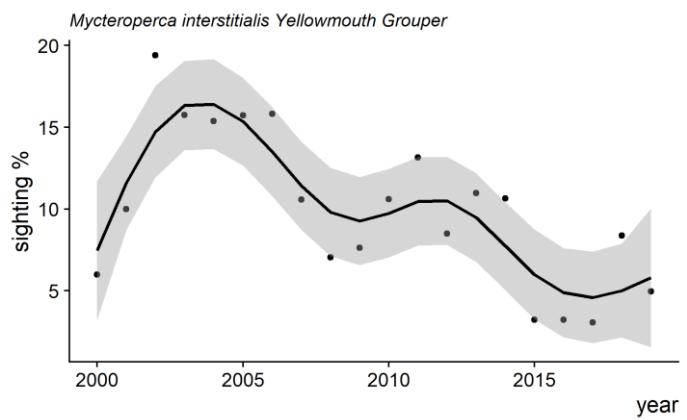
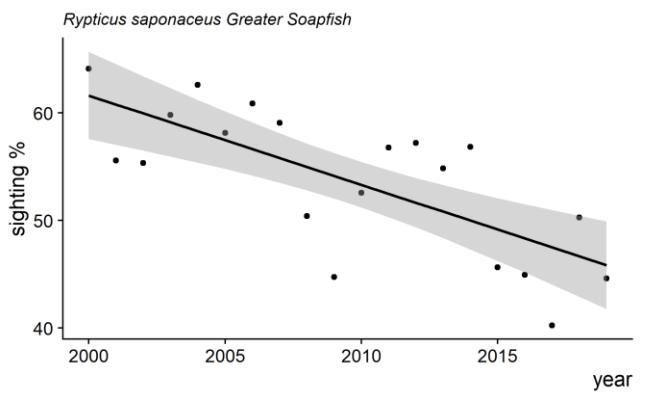
Small grouper



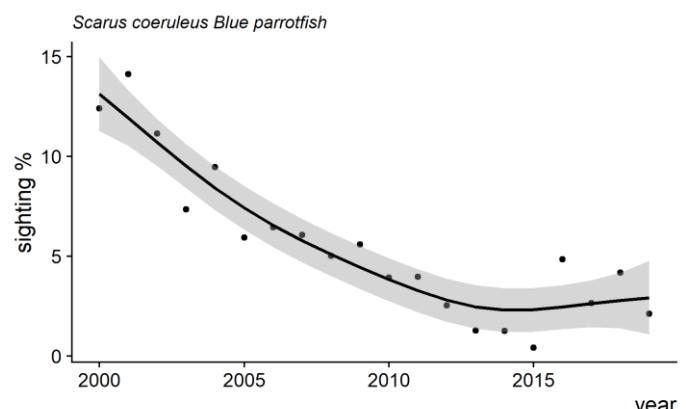
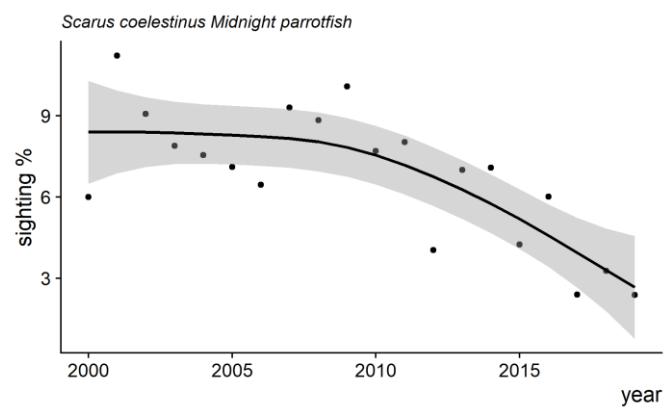
Mid-sized grouper



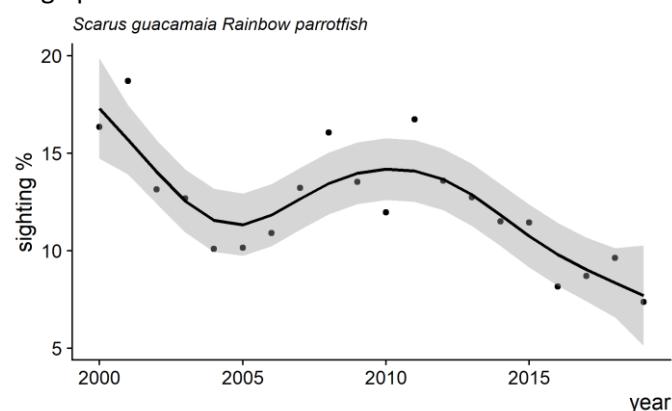
Large grouper



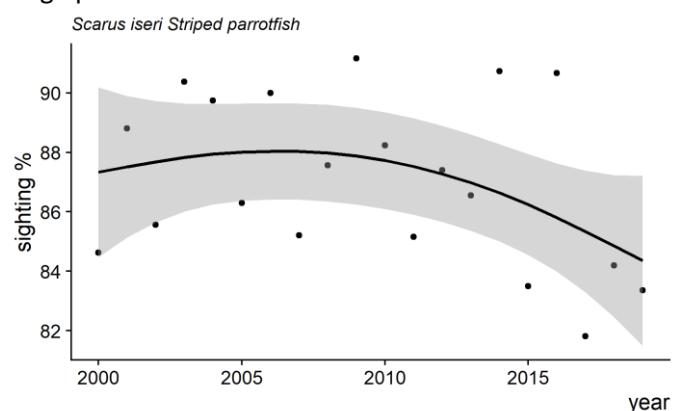
Scaridae Parrotfishes (Herbivorous coral grazers)



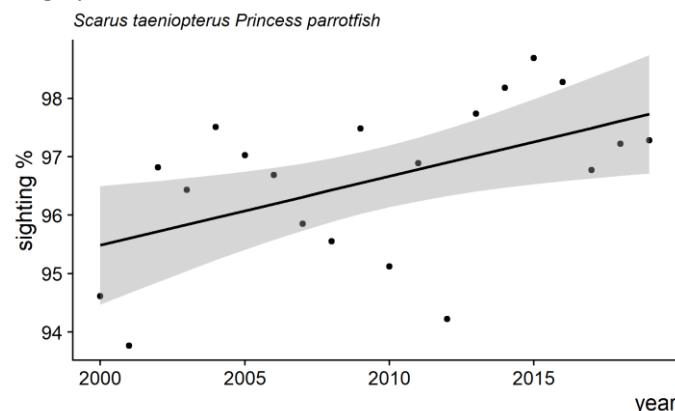
Large parrotfish



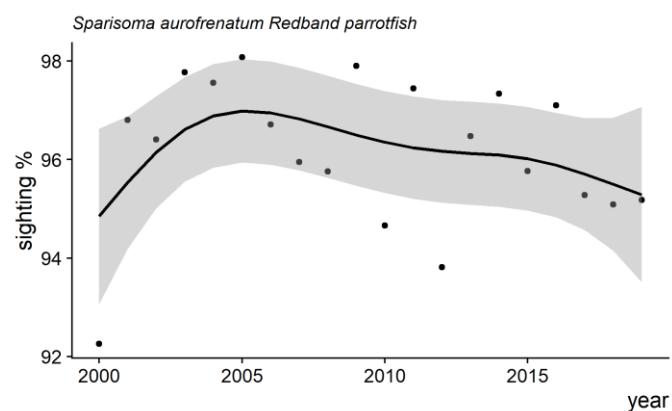
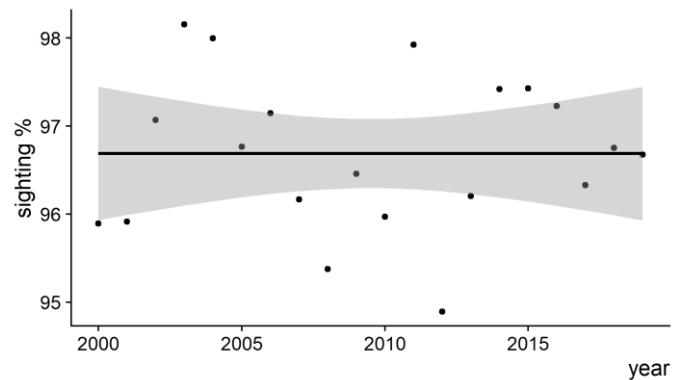
Large parrotfish



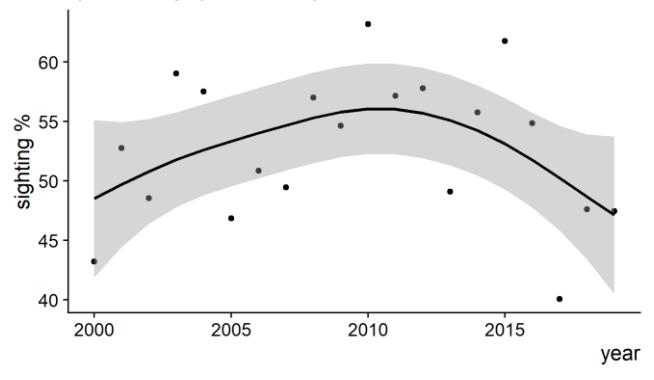
Large parrotfish

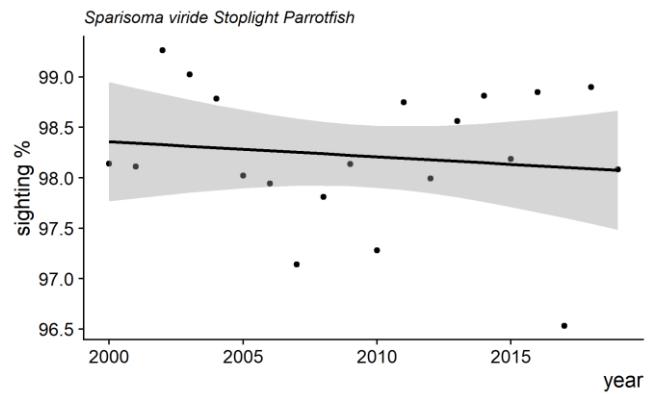
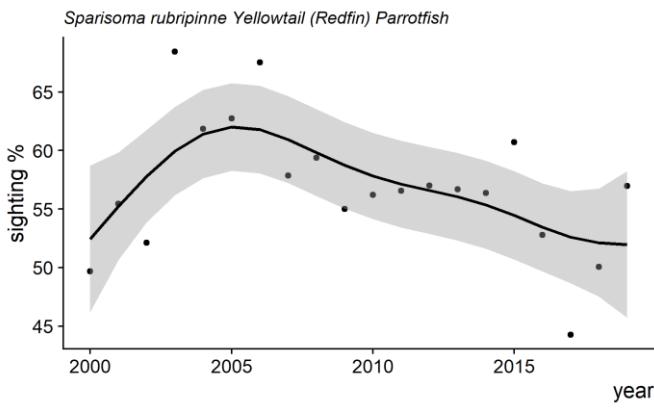


Scarus vetula Queen parrotfish

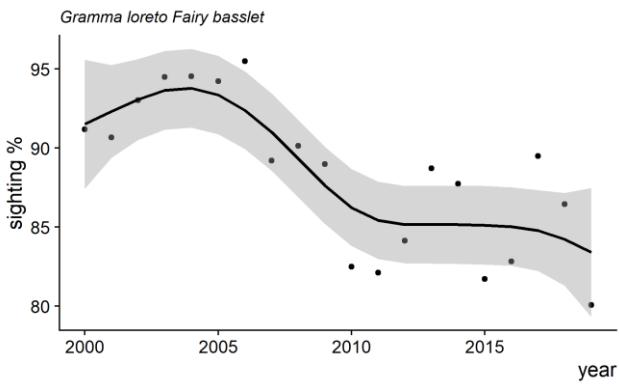


Sparisoma chrysopterum Redtail parrotfish

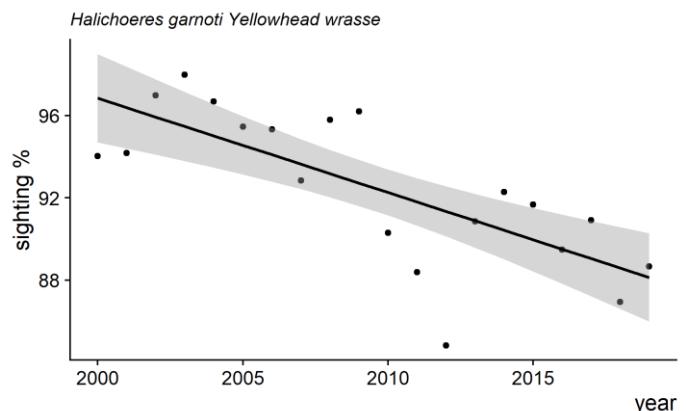
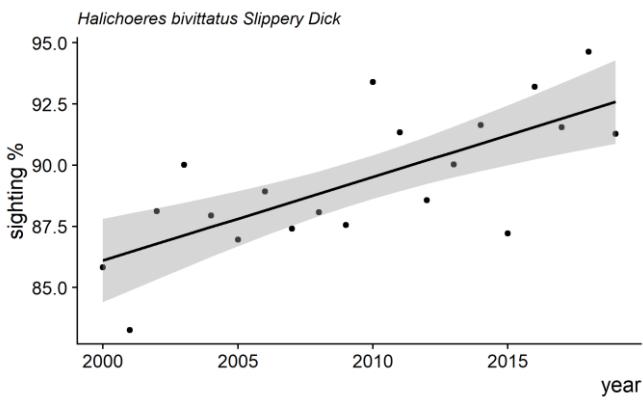
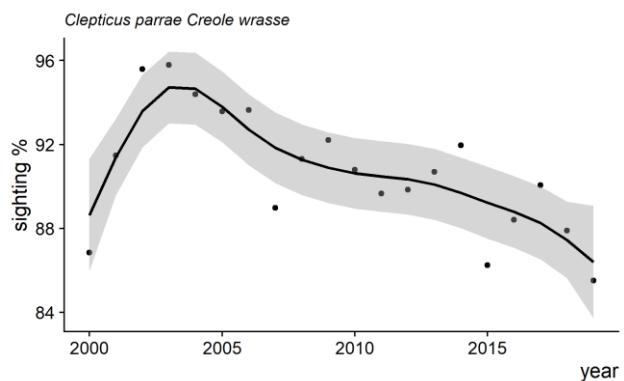
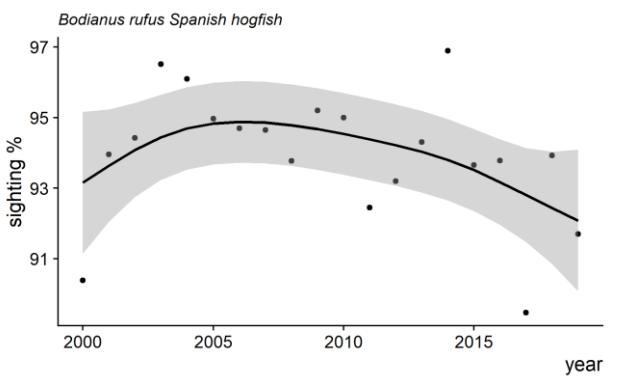


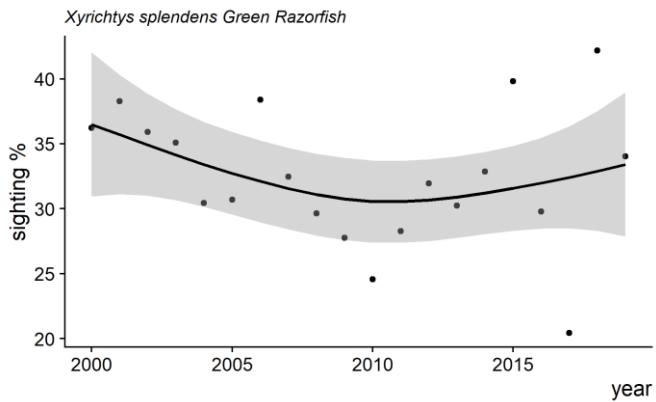
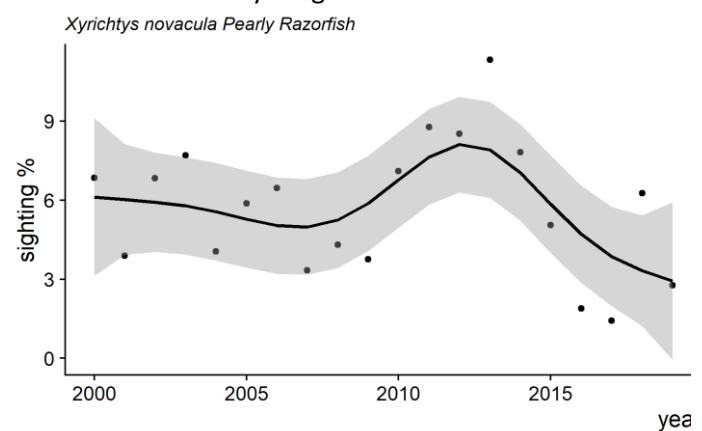
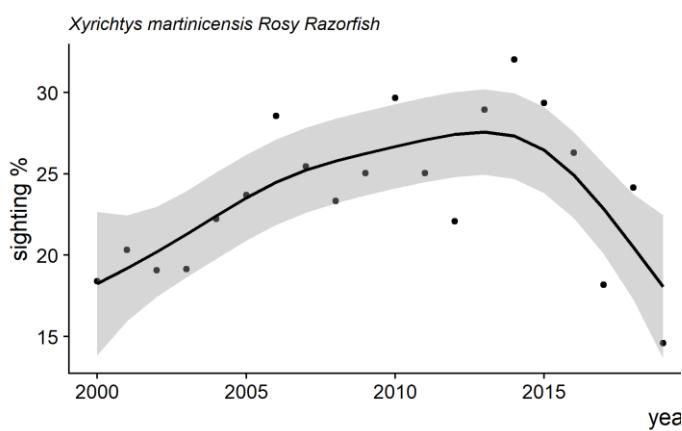
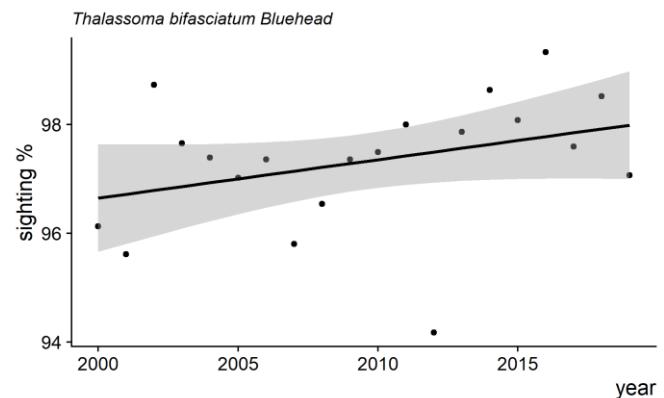
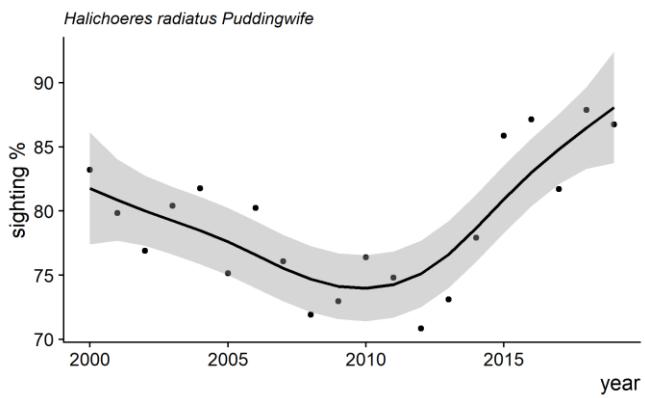
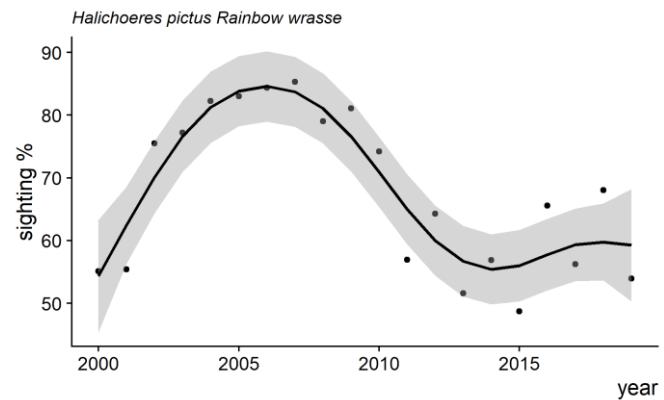
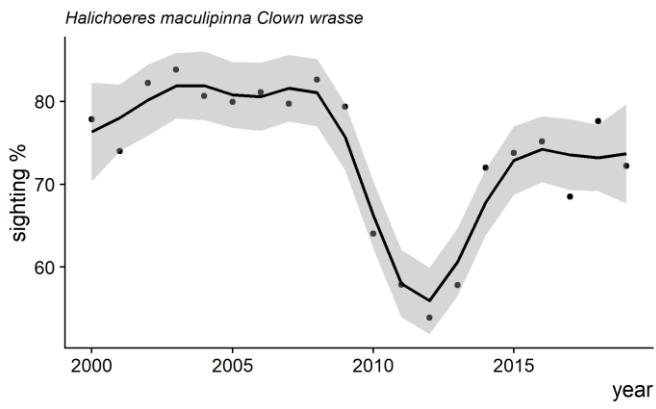


Grammatidae Basslets

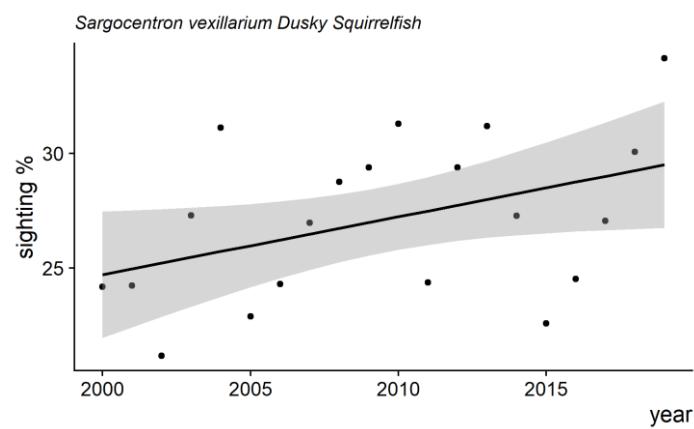
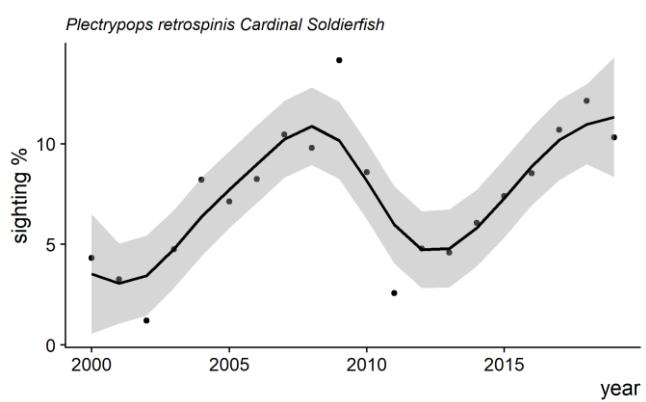
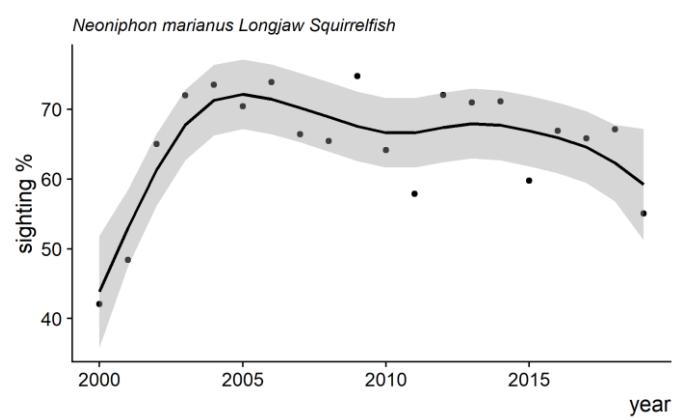
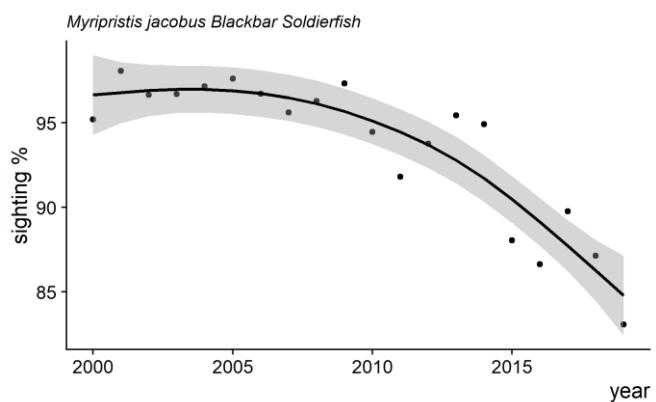
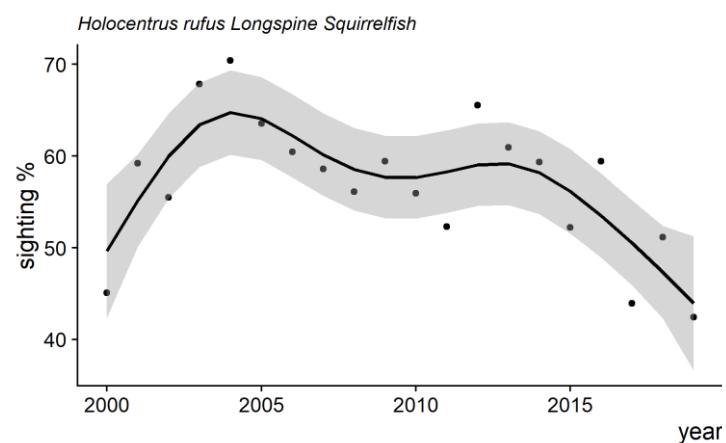
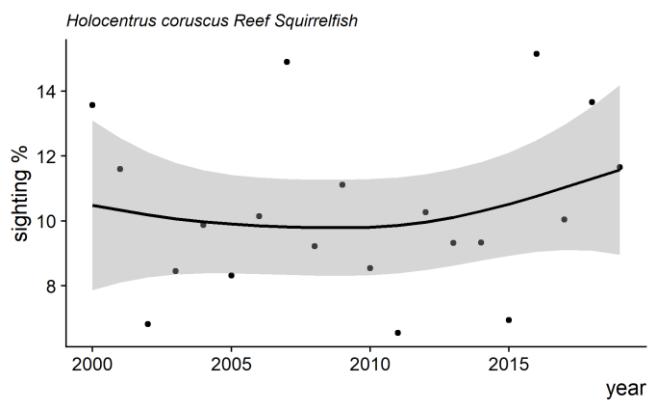
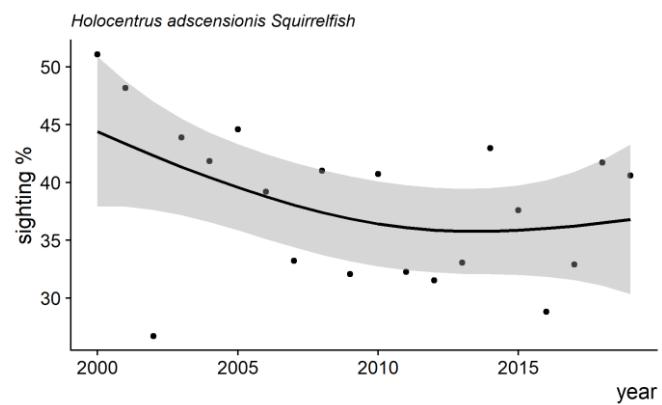


Labridae Wrasses

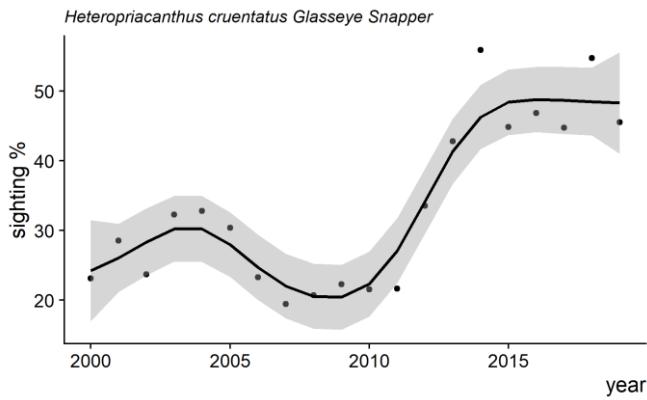




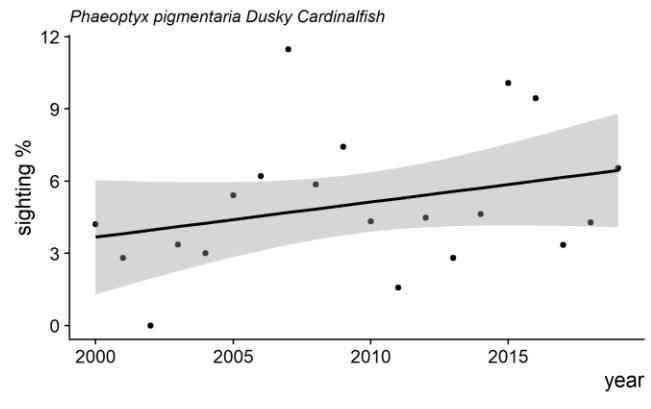
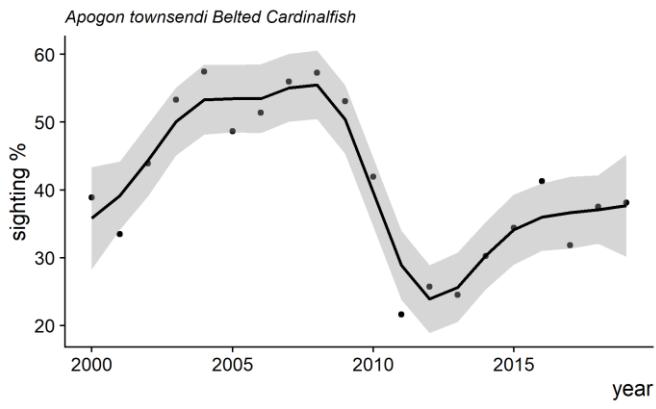
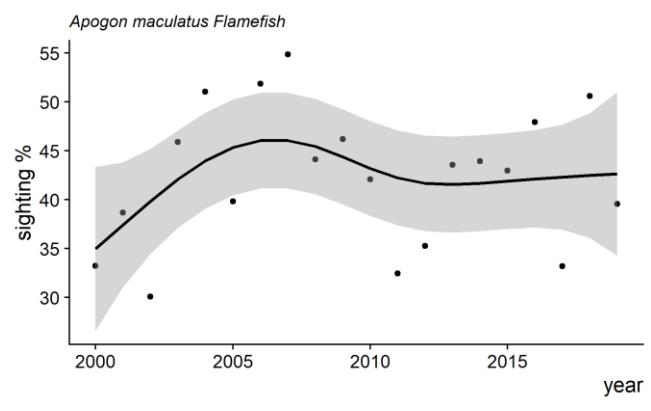
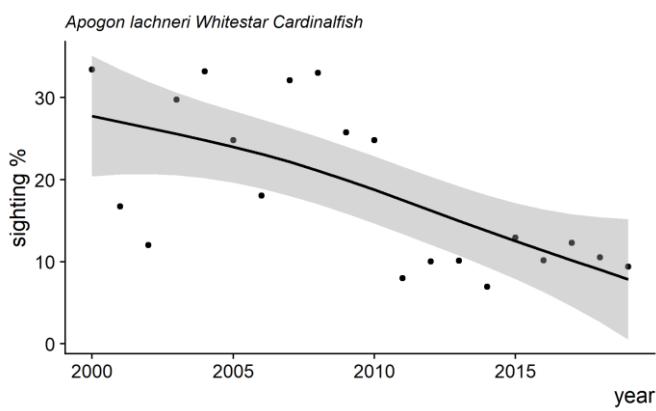
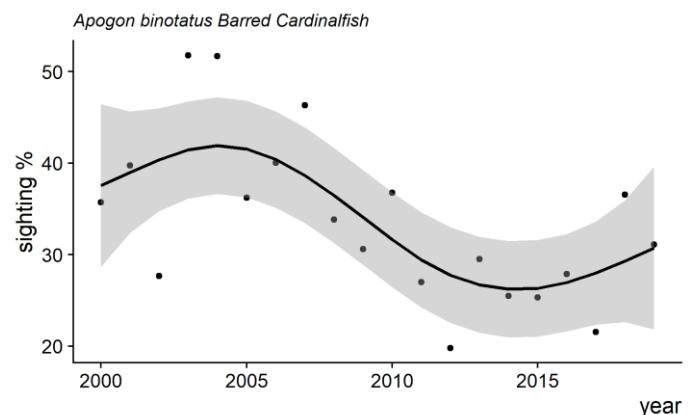
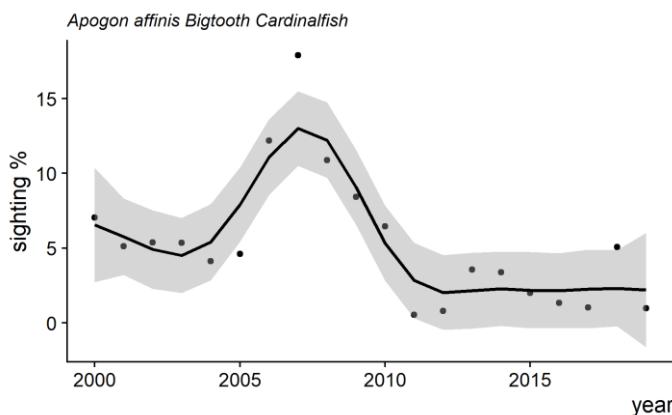
Holocentridae Squirrelfishes (Piscivorous)

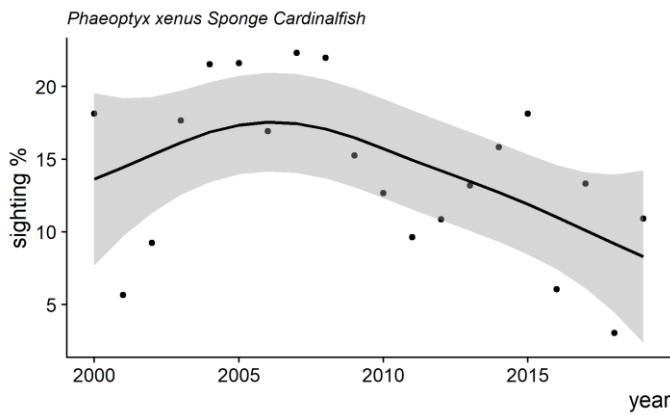


Priacanthidae Bigeyes

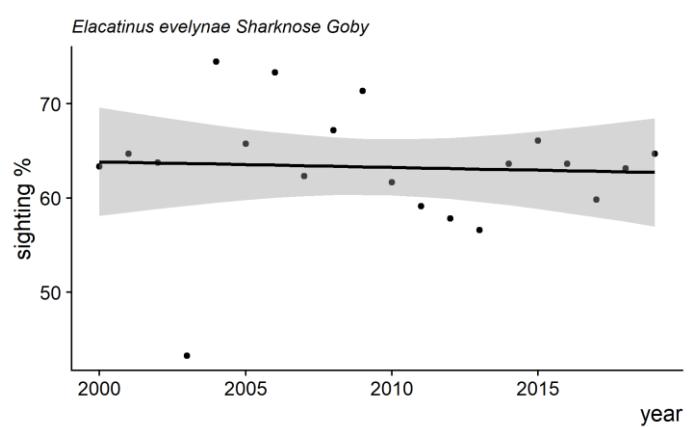
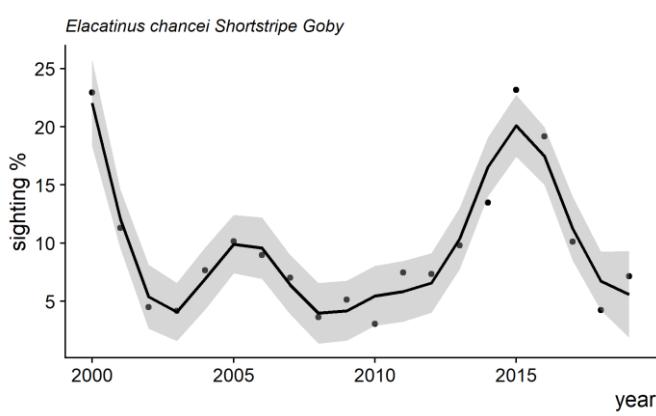
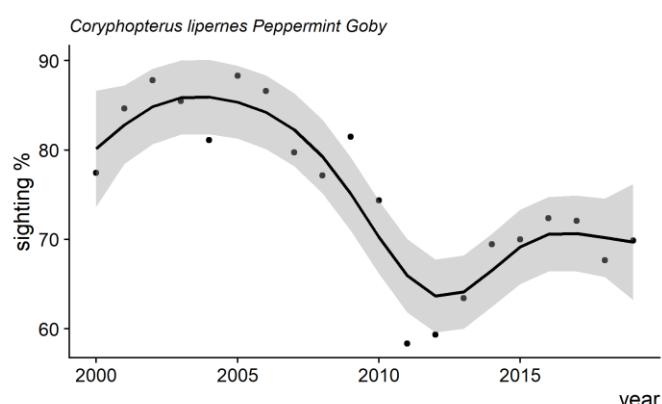
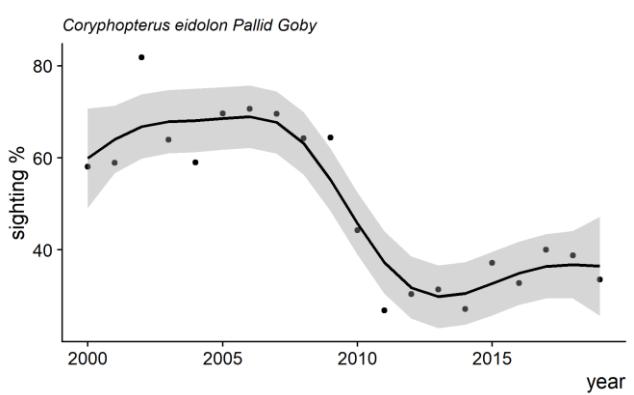
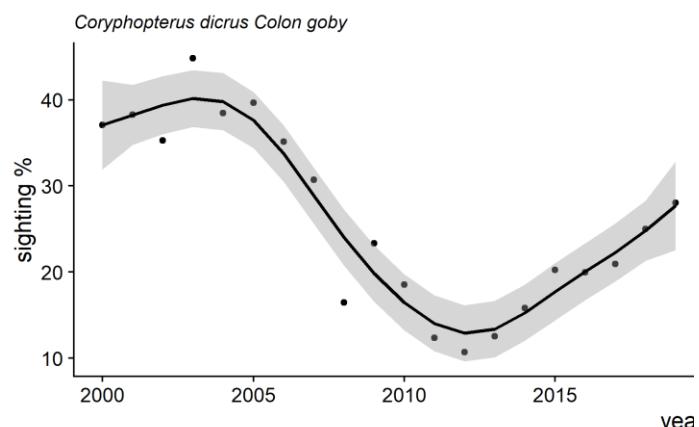
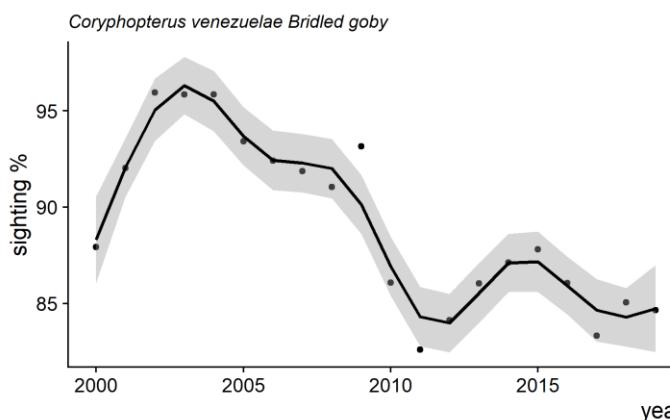


Apogonidae Cardinalfishes (Piscivorous)



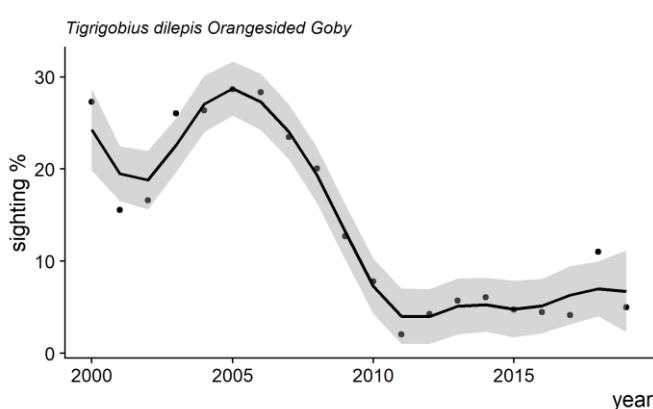
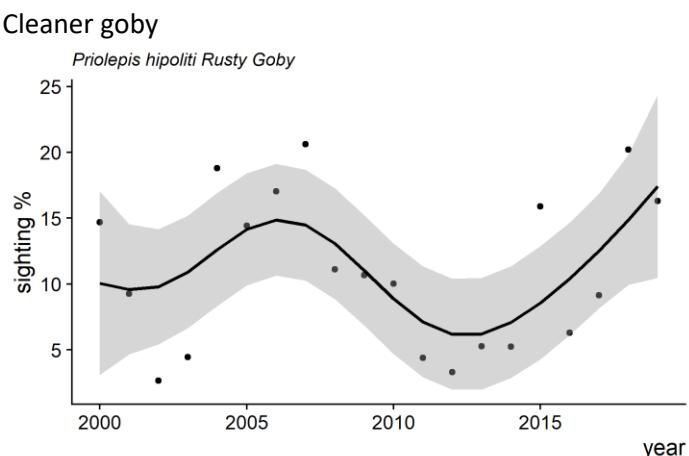
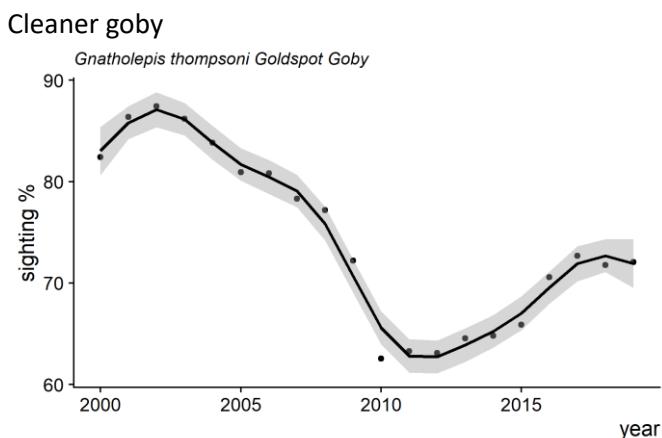
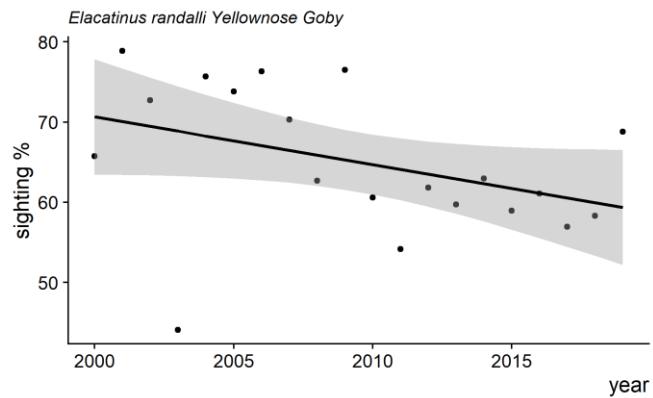
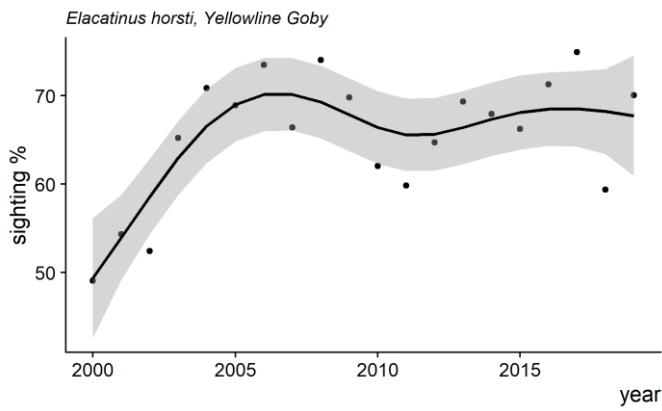


Gobiidae Gobies

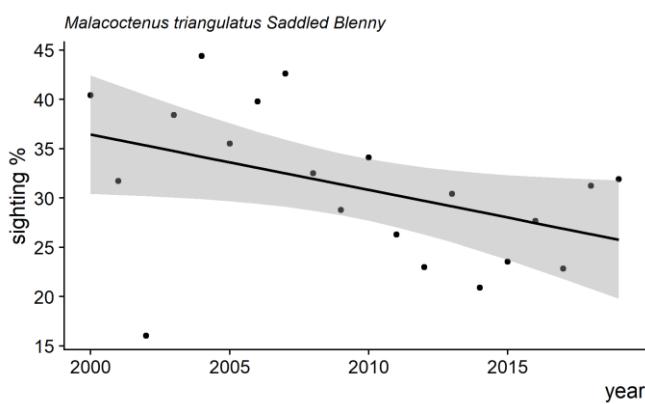


Cleaner goby

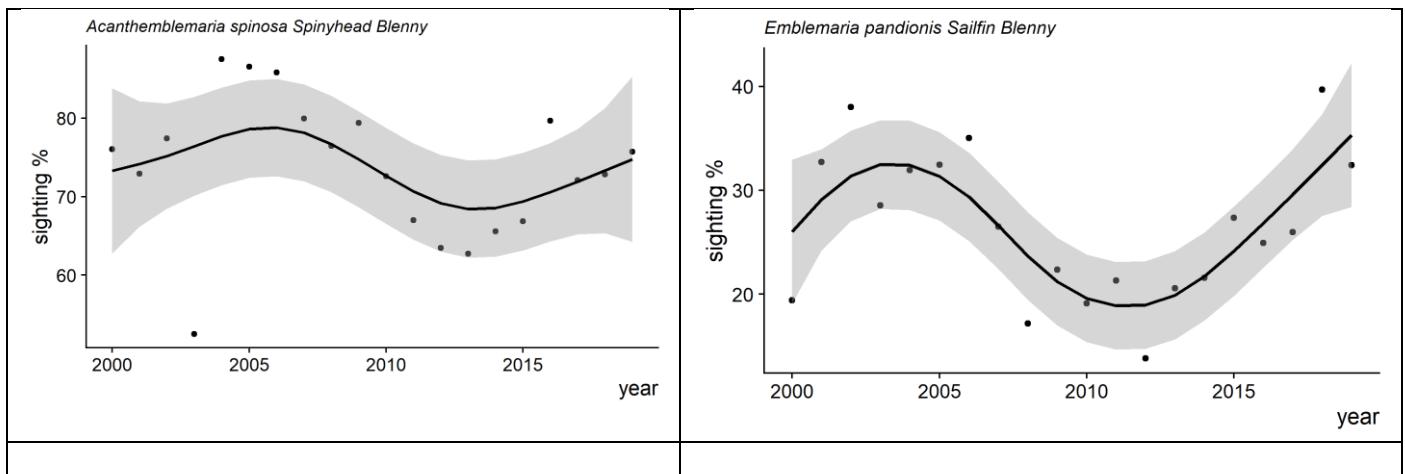
Cleaner goby



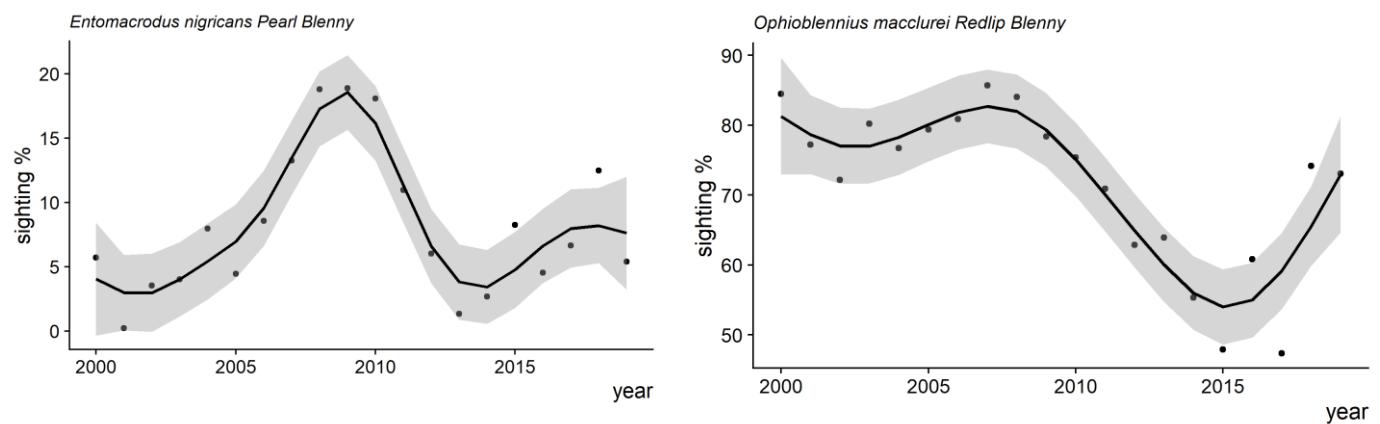
Labrisomidae Labrisomid blennies



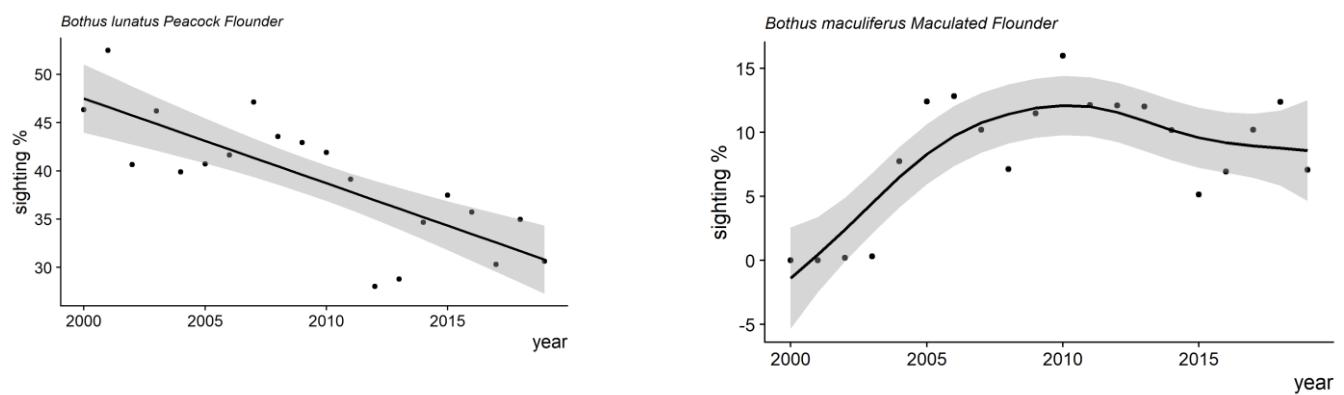
Chaenopsidae Flag blennies



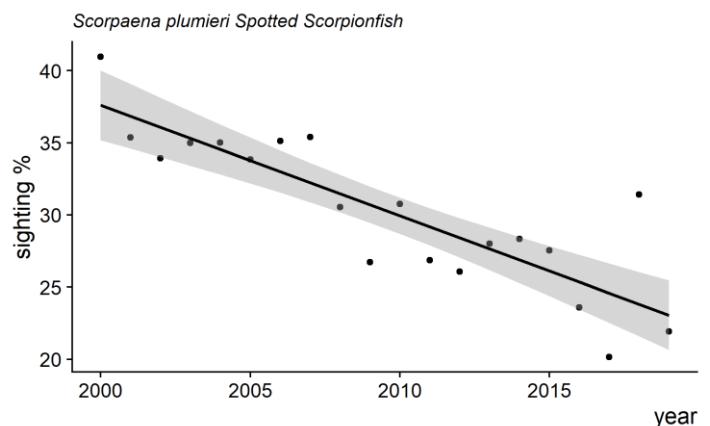
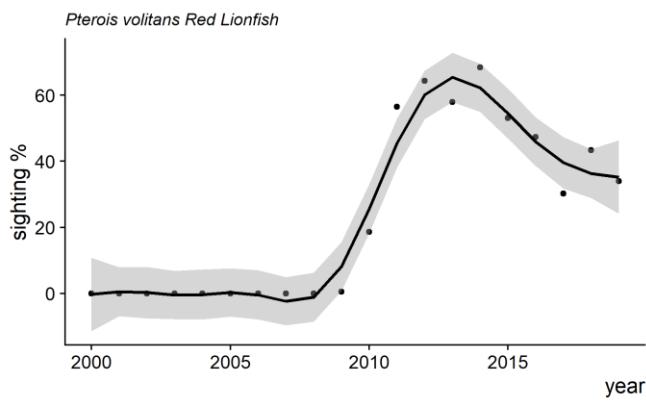
Blenniidae Combtooth blennies



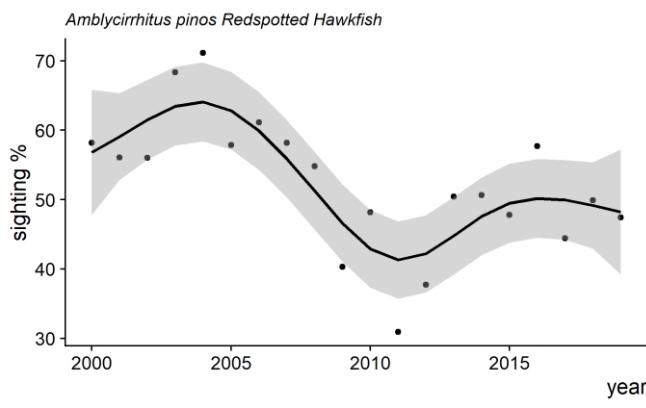
Bothidae Left-eye Flounders (Piscivorous)



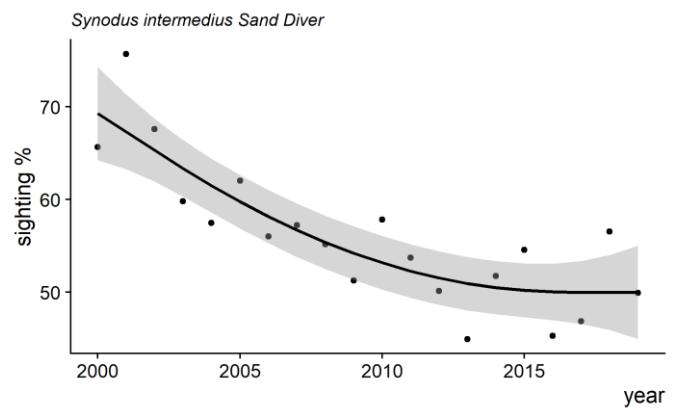
Scorpaenidae Scorpionfishes (Piscivorous)



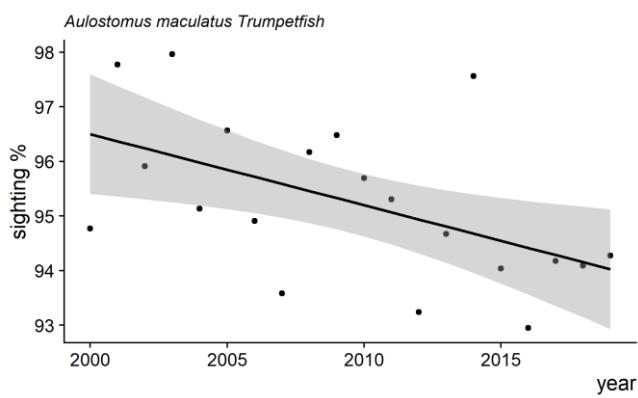
Cirrhitidae Hawkfishes



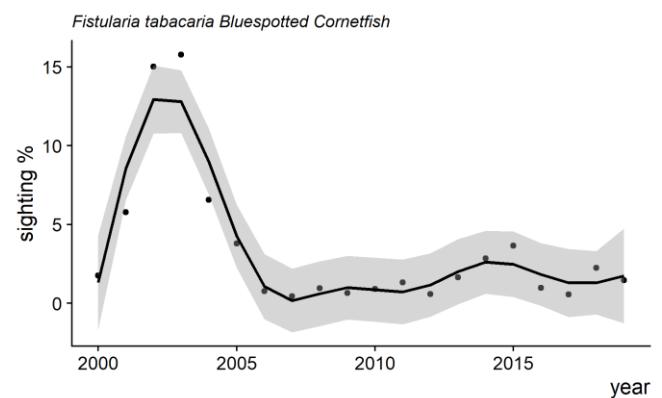
Synodontidae Lizardfishes (Piscivorous)



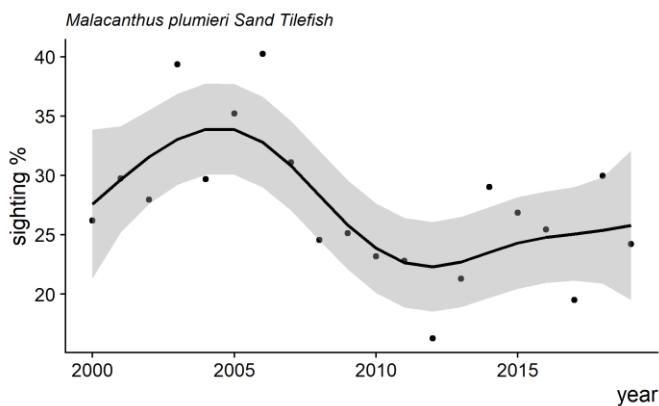
Aulostomidae Trumpetfishes (Piscivorous)



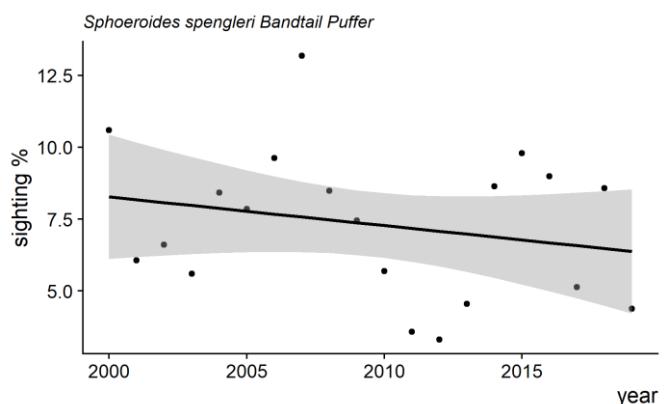
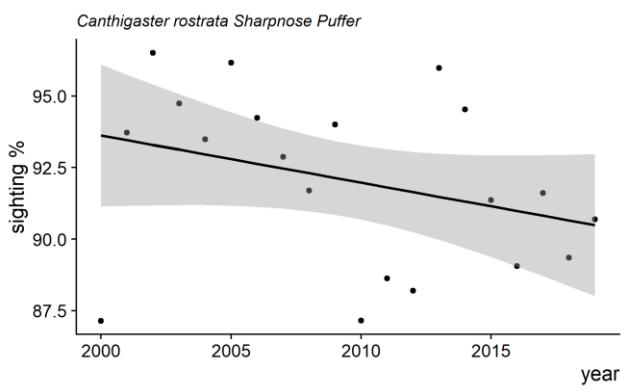
Fistulariidae Cornetfishes (Piscivorous)



Malacanthidae Tilefishes

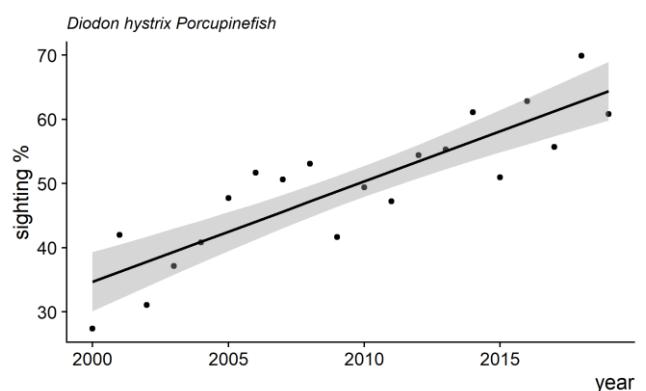
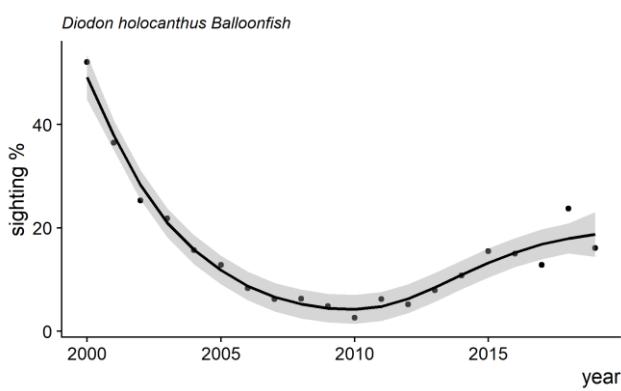


Tetraodontidae Puffers

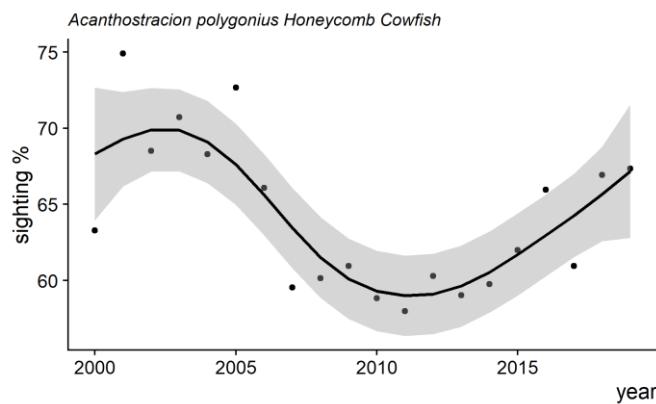


Facultative spongivorous for 15%

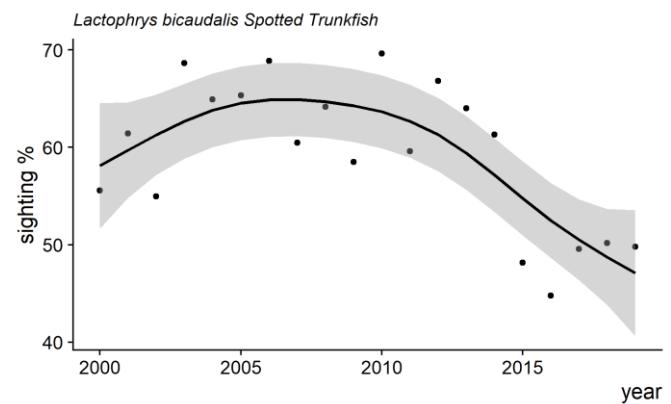
Diodontidae Porcupinefishes



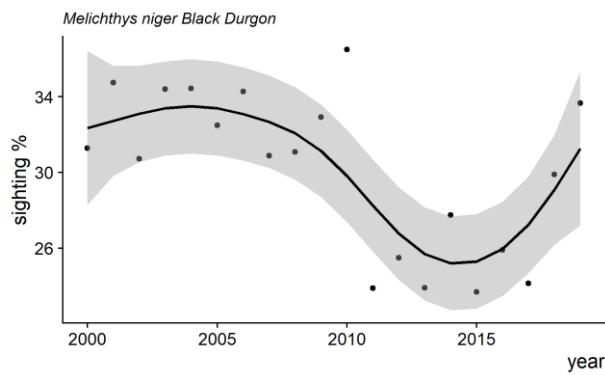
Ostraciidae Boxfishes



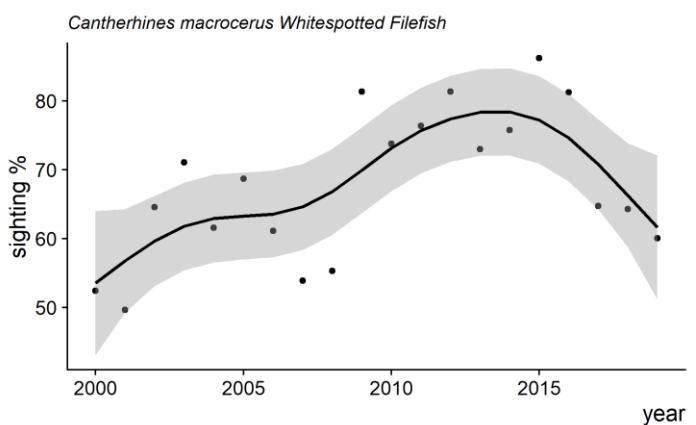
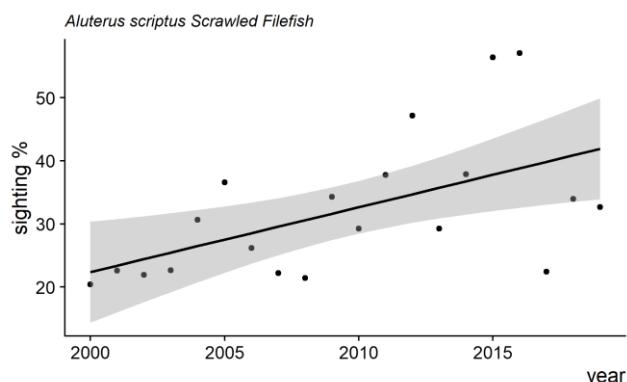
Facultative Spongivorous for 12%



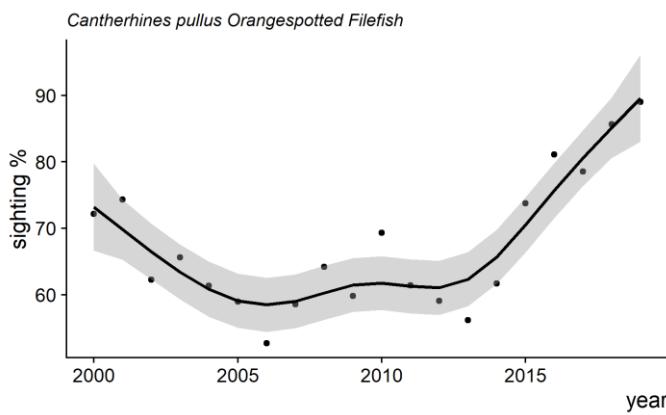
Balistidae Triggerfishes



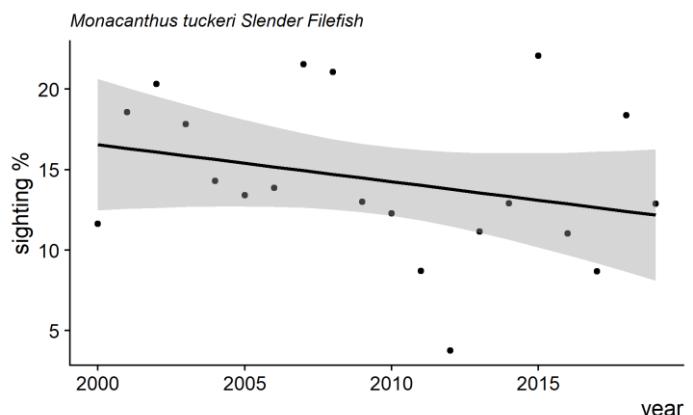
Monacanthidae Filefishes



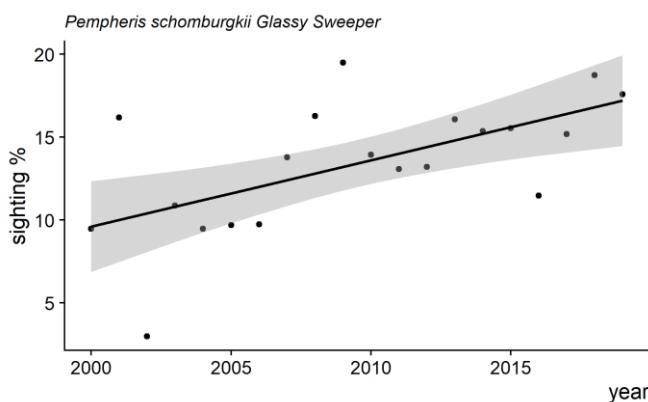
(Facultative) Spongivorous for 87%



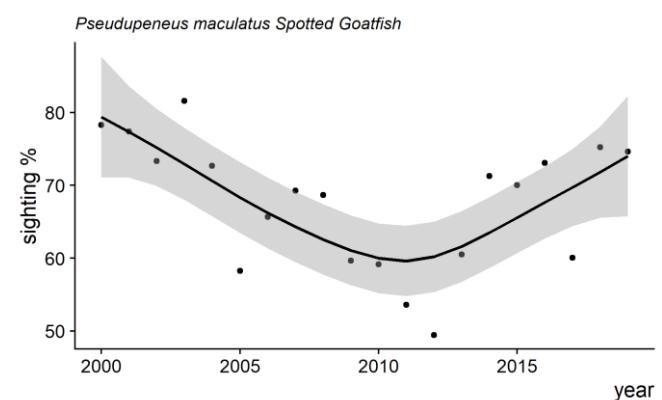
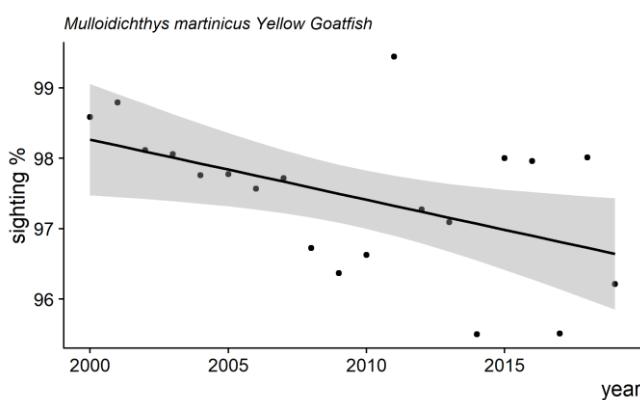
Facultative Spongivorous for 31%



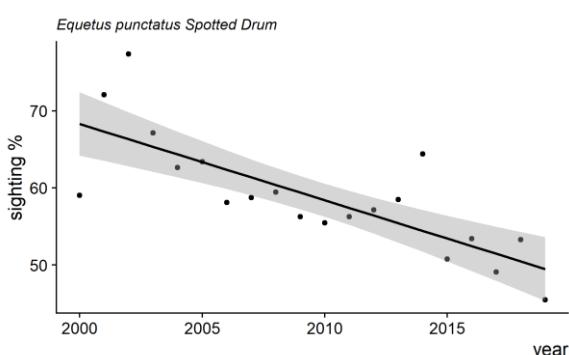
Pempheridae Sweepers



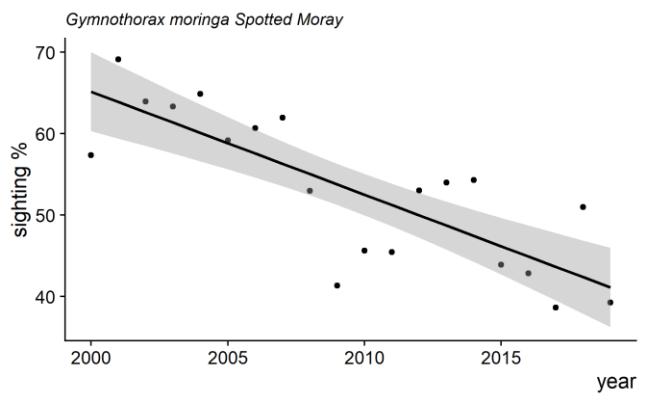
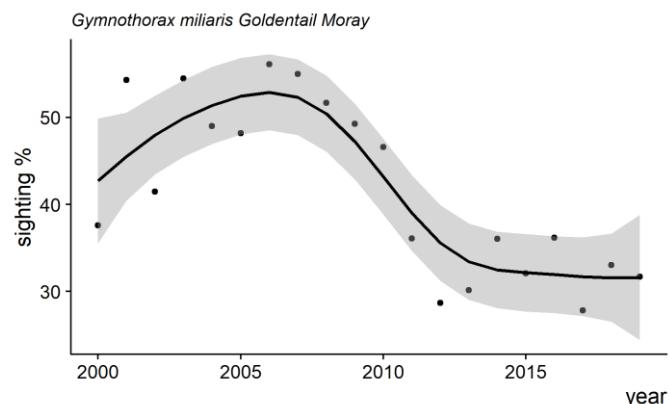
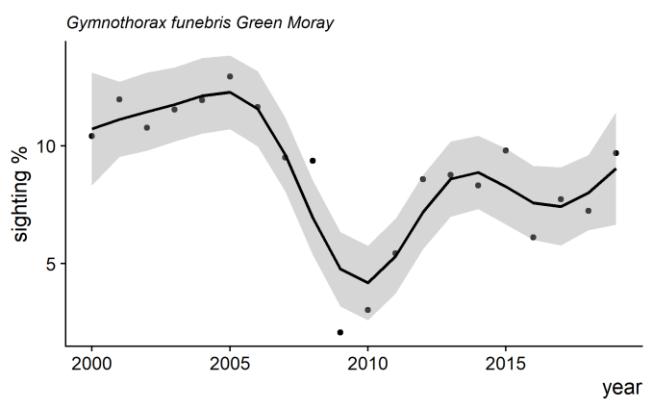
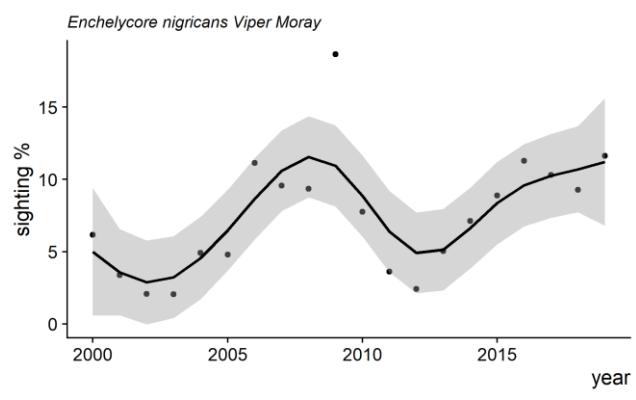
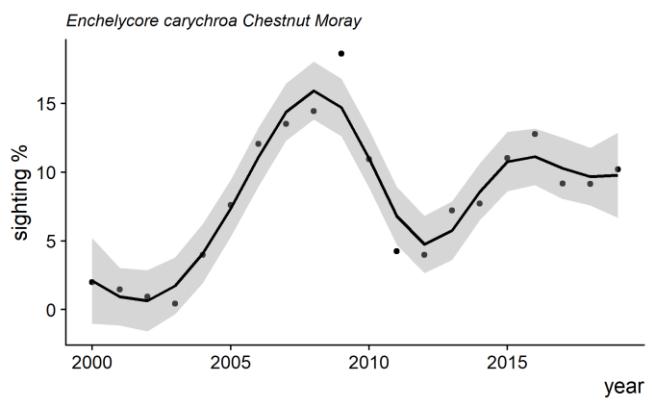
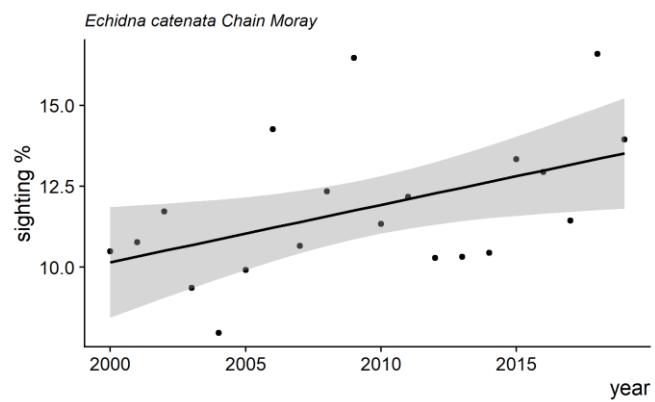
Mullidae Goatfishes (Piscivorous)



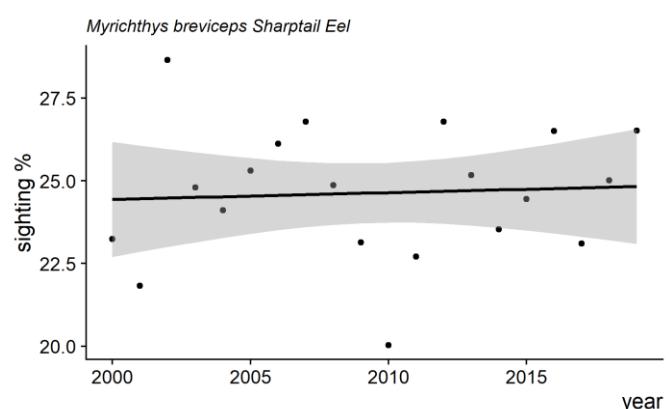
Sciaenidae Drums



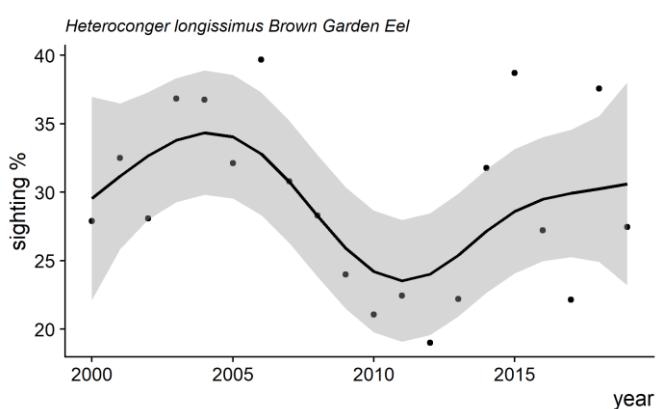
Muraenidae Moray eels (Piscivorous)



Ophichthidae Snake eels (Piscivorous)



Congridae Conger eels



Sources on ecological roles

Hixon, M., 2015. Predation: Piscivory and the ecology of coral reef fishes. In C. Mora (Ed.), *Ecology of fishes on coral reefs* (pp. 41–52). Cambridge, UK: Cambridge University Press.

Randall JE, Hartman WD, 1968. Sponge-feeding fishes of the West Indies. *Marine Biology* 1: 216–225.

Rotjan RD, Lewis SM, 2008. Impact of coral predators on tropical reefs. *Marine Ecology Progress Series* 367:73–91.