

Notes on dataset for Elise Collett, St.FX

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Last modified: 2021-10-06 18:14:38

Collaboration with St. FX

Species considered

To get things started, I am generating a dataset similar to that used by Benoit and Swain (2008). Table A1 in Benoit & Swain shows 52 species. Let's try and reproduce that table by using the correct species codes in the RV database.

Table 1: The 52 species of interest, meant to match Table A1 in Benoit and Swain.

	family	LATIN	ENGLISH	aphia_id	
Myxini					
<i>Myxiniiformes</i>					
	Myxinidae	Myxine glutinosa	Atlantic hagfish	101170	
Elasmobranchii					
<i>Rajiformes</i>					
	Rajidae	Amblyraja radiata	Thorny skate	105865	
		Leucoraja ocellata	Winter skate	158553	
		Malacoraja senta	Smooth skate	158554	
<i>Squaliformes</i>					
	Squalidae	Squalus acanthias	Spiny dogfish	105923	
	Etmopteridae	Centroscyllium fabricii	Black dogfish	105906	
Actinopteri					
<i>Aulopiformes</i>					
	Paralepididae	Arctozenus risso	White barracudina	126352	
<i>Clupeiformes</i>					
	Clupeidae	Alosa pseudoharengus	Alewife	158669	
		Clupea harengus	Atlantic herring	126417	
<i>Gadiformes</i>					
	Gadidae	Boreogadus saida	Arctic cod	126433	
		Gadus morhua	Atlantic cod	126436	
		Gadus macrocephalus	Greenland cod	254538	
		Melanogrammus aeglefinus	Haddock	126437	
		Pollachius virens	Pollock	126441	
		Macrouridae	Nezumia bairdii	Marlin-spike grenadier	183289
		Merlucciidae	Merluccius bilinearis	Silver hake	158962
		Lotidae	Enchelyopus cimbrius	Fourbeard rockling	126450
		Phycidae	Phycis chesteri	Longfin hake	158988
		Urophycis tenuis	White hake	126504	
<i>Perciformes</i>					
	Gasterosteidae	Gasterosteus aculeatus	Three-spined stickleback	126505	
<i>Osmeriformes</i>					

		Osmeridae	Mallotus villosus	Capelin	126735
			Osmerus mordax	Rainbow smelt	126737
<i>Perciformes</i>					
		Ammodytidae	Ammodytes dubius	Northern sand lance	151520
		Anarhichadidae	Anarhichas lupus	Atlantic wolffish	126758
<i>Eupercaria incertae sedis</i>					
		Labridae	Tautogolabrus adspersus	Cunner	159785
<i>Perciformes</i>					
		Stichaeidae	Leptoclinus maculatus	Daubed shanny	127072
			Lumpenus lampretaeformis	Snakeblenny	154675
			Stichaeus punctatus punctatus	Arctic shanny	293745
		Zoarcidae	Gymnelus viridis	Fish doctor	127096
			Zoarcidae (f.)	Eelpouts unidentified	125575
			Melanostigma atlanticum	Atlantic soft pout	127120
			Zoarces americanus	Ocean pout	159267
<i>Pleuronectiformes</i>					
		Pleuronectidae	Glyptocephalus cynoglossus	Witch flounder	127136
			Hippoglossoides platessoides	American plaice	127137
			Hippoglossus hippoglossus	Atlantic halibut	127138
			Limanda ferruginea	Yellowtail flounder	158879
			Pseudopleuronectes americanus	Winter flounder	158885
			Reinhardtius hippoglossoides	Greenland halibut	127144
		Scophthalmidae	Scophthalmus aquosus	Windowpane flounder	158907
<i>Perciformes</i>					
		Agonidae	Aspidophoroides monopterygius	Alligatorfish	159459
			Leptagonus decagonus	Atlantic poacher	127191
		Cottidae	Artediellus atlanticus	Atlantic hookeyar sculpin	127193
			Icelus spatula	Spatulate sculpin	127200
			Myoxocephalus octodecemspinosus	Longhorn sculpin	159520
			Myoxocephalus scorpioides	Arctic sculpin	127202
			Myoxocephalus scorpius	Shorthorn sculpin	127203
			Triglops murrayi	Moustache sculpin	127205
		Cyclopteridae	Cyclopterus lumpus	Lumpfish	127214
		Liparidae	Liparis atlanticus	Atlantic seasnail	159524
<i>Scorpaeniformes</i>					
		Hemitripterae	Hemitripterus americanus	Sea raven	159518
<i>Perciformes</i>					
		Psychrolutidae	Cottunculus microps	Polar sculpin	127235
		Sebastidae	Sebastes sp.	Redfish unidentified	126175

Dataset of abundance per tow

Now extract set cards and catch cards for representative sets in strata 415 to 439, and compute the yearly stratified random estimate of abundance per tow, corrected for gear, vessel and diurnal effects.

Tow-level dataset