Use of SCN features: No

Max learning objects: 20000 objects/class Strategy N° 2

Actual Values

NL 2021 Selected Samples prediction using NL 2021 training set, Learning with all classes present in the selected samples, with extra training categories, No Calanoida (civ-vi), Cyclopoida, Zooplankton classes in learning set

												Confu	ısion	Ма	trix -	- In _I	perce	nt o	f Act	ual V	alue										
Acartia spp.	72%	<1%	7%	8%	3%			8%		<1%		<1%				<1%	<1%		<1%							<1%	<1%			<1%	
Evadne spp.		92%	<1%	<1%	<1%	<1%	2%	<1%						<1%	<1%	<1%			<1%							2%	1%				
Temora spp.	14%	1%	54%	8%	3%			14%									<1%									2%	3%			<1%	
Pseudocalanus spp.	20%		14%	56%				8%				<1%					<1%			<1%							<1%		<1%		
Oithona spp.	11%	1%	<1%		80%	<1%		3%				<1%				3%										<1%					
Bryozoa (larvae)		31%				54%	<1%	2%			<1%	<1%		2%		<1%			<1%							1%	6%				
Podon/Pleopsis spp.	1%	10%	13%	1%		<1%	12%	3%			<1%					<1%	1%		14%							14%	27%				
Calanoida (ci-ciii)	11%	8%	8%	7%	4%	<1%	5%	25%									3%		<1%	2%						2%	25%				
Oikopleura spp.			2%	3%	3%	<1%		<1%	61%		<1%					25%		<1%		2%					<1%				<1%		
Centropages spp.	65%		7%	1%					1%	24%										1%				19	ó						
Echinodermata (larvae)	2%				20%			2%	2%		18%					46%			2%							2%	4%			2%	
Harpacticoida- epibenthic	21%		4%	9%	9%			11%				38%															6%		2%		
Hydrozoa (medusa)		21%				2%	4%	2%			4%		4%	2%		19%				4%	G	%	2%			13%	2%	11%			
Gastropoda (larvae/Limacina)		6%					11%							57%	13%				11%								2%				
Bivalvia (larvae)						5%	5%							14%	77%																
Fritillaria spp.					6%			6%	6%		3%					79%															
Microcalanus spp.		6%	3%	10%				23%				3%					19%		10%							3%	23%				
Chaetognatha									25%							11%		61%		4%											
Polychaeta (larvae)	5%	5%	5%		10%		5%												40%							15%	10%	5%			
Calanus spp.	7%			14%																79%											
Eurytemora spp.	50%		20%	30%																											
Aglantha spp. (medusa)									11%				11%								5	ĵ%	11%					11%			
Oncaeidae spp.	17%			17%	17%			17%				33%																			
Sarsia spp. (medusa)																25%							25%			25%		25%			
Ostracoda						50%																					50%				
Tortanus spp.	50%																							50	%						
ecapoda-non brachyura (larvae)											·									100%											
	Acar	\$\langle \langle \lang	Temo.	PSell Spp.	Oitho Oitho	Bryon Spp.	Podo, lan	Calan Pleass	Oitop is Spp.	Centi Clin Sp	Chill pages s	Harpe Odermare	Hydroida (lange)	Castle Ca	Bivally opoda (lo	Proclin	Micro Sp.	Chael Calanus,	Polytognatha	Calany Car	Curytemo	Aglantha Spp.	Sarsia (medusa)	Sp. (nedus	Decapus Spp.	Cirril Polds Pol	Copey of brachy,	Obelia node (nau)	Suphal Spp. (mi	Euphaus (le Clusa)	Siacea (nauplii)
																	Cina) d Val											(lande)		Extr	ra ning

Classification Report Matrix max 20000 learning objects per class

	precision	recall	f1-score	
Acartia spp. (n=2490-train=5448)	0.77	0.72	0.75	
Evadne spp. (n=1931-train=2845)	0.92	0.92	0.92	
Temora spp. (n=1416-train=5148)	0.67	0.54	0.60	
Pseudocalanus spp. (n=1044-train=4552)	0.63	0.56	0.60	
Oithona spp. (n=345-train=1409)	0.67	0.80	0.73	
Bryozoa (larvae) (n=248-train=119)	0.92	0.54	0.68	
Podon/Pleopsis spp. (n=230-train=201)	0.31	0.12	0.17	
Calanoida (ci-ciii) (n=130-train=3713)	0.06	0.25	0.09	
Oikopleura spp. (n=115-train=761)	0.85	0.61	0.71	
Centropages spp. (n=88-train=40)	0.95	0.24	0.38	0
Echinodermata (larvae) (n=50-train=276)	0.56	0.18	0.27	
Harpacticoida- epibenthic (n=47-train=136)	0.51	0.38	0.44	
Hydrozoa (medusa) (n=47-train=21)	0.67	0.04	0.08	
Gastropoda (larvae/Limacina) (n=47-train=110)	0.50	0.57	0.53	
Bivalvia (larvae) (n=44-train=71)	0.72	0.77	0.75	0
Fritillaria spp. (n=34-train=3447)	0.22	0.79	0.34	
Microcalanus spp. (n=31-train=80)	0.30	0.19	0.24	
Chaetognatha (n=28-train=67)	0.94	0.61	0.74	
Polychaeta (larvae) (n=20-train=452)	0.13	0.40	0.19	0
Calanus spp. (n=14-train=213)	0.50	0.79	0.61	
Eurytemora spp. (n=10-train=88)	0.00	0.00	0.00	
Aglantha spp. (medusa) (n=9-train=21)	0.56	0.56	0.56	
Oncaeidae spp. (n=6-train=16)	0.00	0.00	0.00	
Sarsia spp. (medusa) (n=4-train=4)	0.33	0.25	0.29	0
Ostracoda (n=2-train=6)	0.00	0.00	0.00	
Tortanus spp. (n=2-train=4)	0.50	0.50	0.50	
ecapoda-non brachyura (larvae) (n=1-train=7)	0.00	0.00	0.00	
Cirripedia (larvae) (n=0-train=611)	-	-	-	
Copepoda (nauplii) (n=0-train=1025)	-	-	-	0
Obelia spp. (medusa) (n=0-train=43)	-	_	-	
Euphausiacea (larvae) (n=0-train=75)	-	_	-	
Euphausiacea (nauplii) (n=0-train=122)	-	-	-	
macro avg (corr)	0.49	0.42	0.41	
weighted avg	0.74	0.67	0.69	
	precision	recall	f1-score	

Predictions of discarded taxa from training 100 0.0% 0.0% 100.0% (n=1) 0.6% (n=2) 24.2% (n=332) Acartia spp. Aglantha spp. (medusa) 0.0% 0.0% 0.0% 0.0% 0.3% (n=1) Bivalvia (larvae) 0.0% 0.0% 0.0% 0.0% 8.5% (n=27) 5.0% (n=16) Bryozoa (larvae) 0.3% (n=4) 0.0% 0.0% 0.0% 80 0.0% Calanoida (ci-ciii) 26.9% (n=369) 0.0% 0.0% 3.5% (n=11) 0.3% (n=1) Calanus spp. 0.0% 0.0% 0.0% 0.1% (n=1) Cirripedia (larvae) 2.2% (n=30) 0.0% 0.0% 0.0% 2.2% (n=7) 0.0% 0.0% Copepoda (nauplii) 6.9% (n=95) 0.0% 6.6% (n=21) 0.0% 0.0% Echinodermata (larvae) 0.0% 0.0% 0.9% (n=3) 60 Predicted Taxa Euphausiacea (nauplii) 0.4% (n=5) 0.0% 0.0% 0.0% 0.0% 50.0% (n=1) 0.0% Evadne spp. 3.8% (n=52) 0.0% 32.1% (n=102) Fritillaria spp. 1.4% (n=19) 0.0% 0.0% 0.0% 2.8% (n=9) Gastropoda (larvae/Limacina) 0.0% 9.7% (n=31) 0.0% 0.0% 0.0% 40 0.0% 0.0% 0.0% 0.0% Harpacticoida- epibenthic 0.5% (n=7) Microcalanus spp. 0.0% 0.0% 0.0% 0.2% (n=3) 50.0% (n=1) Oikopleura spp. 0.1% (n=2) 0.0% 0.0% 0.0% 0.3% (n=1) 0.0% 0.0% 0.0% Oithona spp. 10.6% (n=145) 3.5% (n=11) 0.0% 0.0% 0.0% Ostracoda 0.0% 1.3% (n=4) 20 Podon/Pleopsis spp. 0.3% (n=4) 0.0% 100.0% (n=1) 0.0% 11.3% (n=36) 0.0% Polychaeta (larvae) 0.4% (n=6) 0.0% 0.0% 6.6% (n=21) Pseudocalanus spp. 12.0% (n=165) 0.0% 0.0% 0.0% 3.8% (n=12) Temora spp. 9.6% (n=131) 0.0% 0.0% 0.0% 0.6% (n=2) 0 Calanoida (civ-vi) Foraminifera $M_{onstrillidae}$ Zooplankton (unid) $C_{yclopoida}$ (unid)Extra training classes

Actual discarded Taxa

Relative Abundance of Top Taxonomic Instances per Sample



