

Use of SCN features: No
Max learning objects: Maximum objects/class
Strategy N° 4

NL 2021 Selected Samples prediction using NL 2021 training set,
Learning with selected samples classes with no low regional training instances, with extra training categories,
No Calanoida (civ-vi), Cyclopoida, Zooplankton classes in learning set

Confusion Matrix - In percent of Actual Value

Classification Report Matrix
max available learning objects per class

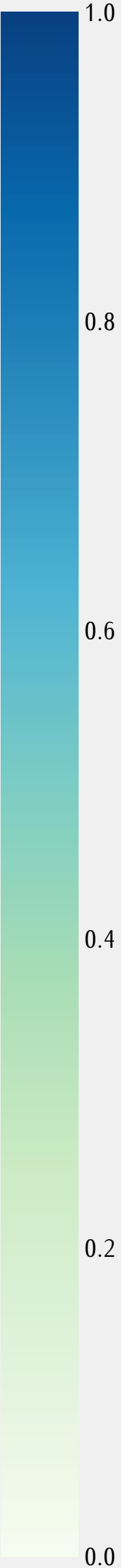
Actual Values

Acartia spp.	73%	<1%	7%	8%	3%			7%				<1%			<1%	<1%		<1%		<1%	<1%			<1%
Evadne spp.		92%	<1%	<1%	<1%	<1%	2%	<1%				<1%	<1%	<1%		<1%		1%	1%					
Temora spp.	14%	1%	55%	9%	3%			13%				<1%			<1%		<1%	2%	3%				<1%	
Pseudocalanus spp.	21%		14%	56%	<1%			8%				<1%			<1%		<1%	<1%	<1%			<1%		
Oithona spp.	11%	1%	<1%		81%	<1%		3%			<1%				3%			<1%						
Bryozoa (larvae)		30%				53%	<1%	4%			1%	<1%	2%	<1%	1%		<1%	<1%	6%					
Podon/Pleopsis spp.	1%	10%	14%	1%		<1%	13%	5%							<1%	1%		15%			13%	24%		
Calanoida (ci-ciii)	12%	8%	10%	6%	4%	<1%	5%	24%								3%		<1%	<1%		2%	25%		
Oikopleura spp.			2%	3%	2%	<1%		2%	63%			<1%			23%							<1%	<1%	
Centropages spp.	61%		7%	2%				1%	26%								1%						1%	
Echinodermata (larvae)	4%				20%			2%	2%		14%				46%			4%			2%	4%		2%
Harpacticoida- epibenthic	21%		4%	9%	9%			13%				38%									4%		2%	
Gastropoda (larvae/Limacina)		9%					11%						57%	11%			11%					2%		
Bivalvia (larvae)						5%	5%						14%	77%										
Fritillaria spp.					12%				3%		3%				82%									
Microcalanus spp.		6%	3%	10%				29%				3%					13%	6%		3%	26%			
Chaetognatha									29%						7%		61%		4%					
Polychaeta (larvae)		5%	10%		5%			5%									40%			10%	20%	5%		
Calanus spp.	7%			14%														79%						
Eurytemora spp.	50%		20%	30%																				

Predicted Values



	precision	recall	f1-score
Acartia spp. (n=2490-train=5448)	0.77	0.73	0.75
Evadne spp. (n=1931-train=2845)	0.92	0.92	0.92
Temora spp. (n=1416-train=5148)	0.67	0.55	0.60
Pseudocalanus spp. (n=1044-train=4552)	0.63	0.56	0.59
Oithona spp. (n=345-train=1409)	0.66	0.81	0.73
Bryozoa (larvae) (n=248-train=119)	0.92	0.53	0.68
Podon/Pleopsis spp. (n=230-train=201)	0.35	0.13	0.19
Calanoida (ci-ciii) (n=130-train=3713)	0.06	0.24	0.09
Oikopleura spp. (n=115-train=761)	0.87	0.63	0.73
Centropages spp. (n=88-train=40)	1.00	0.26	0.41
Echinodermata (larvae) (n=50-train=276)	0.54	0.14	0.22
Harpacticoida- epibenthic (n=47-train=136)	0.56	0.38	0.46
Gastropoda (larvae/Limacina) (n=47-train=110)	0.53	0.57	0.55
Bivalvia (larvae) (n=44-train=71)	0.76	0.77	0.76
Fritillaria spp. (n=34-train=3447)	0.25	0.82	0.39
Microcalanus spp. (n=31-train=80)	0.21	0.13	0.16
Chaetognatha (n=28-train=67)	1.00	0.61	0.76
Polychaeta (larvae) (n=20-train=452)	0.12	0.40	0.19
Calanus spp. (n=14-train=213)	0.65	0.79	0.71
Eurytemora spp. (n=10-train=88)	0.00	0.00	0.00
Cirripedia (larvae) (n=0-train=611)	-	-	-
Copepoda (nauplii) (n=0-train=1025)	-	-	-
Obelia spp. (medusa) (n=0-train=43)	-	-	-
Euphausiacea (larvae) (n=0-train=75)	-	-	-
Euphausiacea (nauplii) (n=0-train=122)	-	-	-
macro avg (corr)	0.57	0.50	0.50
weighted avg	0.74	0.68	0.70
	precision	recall	f1-score



Predictions of discarded taxa from training

Predicted Taxa

Acartia spp.	0.0%	24.6% <small>(n=337)</small>	0.0%	0.0%	0.0%	0.0%	100.0% <small>(n=1)</small>	16.7% <small>(n=1)</small>	0.0%	0.0%	50.0% <small>(n=1)</small>	0.9% <small>(n=3)</small>
Bivalvia (larvae)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	10.4% <small>(n=33)</small>
Bryozoa (larvae)	0.0%	0.3% <small>(n=4)</small>	0.0%	0.0%	0.0%	2.1% <small>(n=1)</small>	0.0%	0.0%	50.0% <small>(n=1)</small>	0.0%	0.0%	5.7% <small>(n=18)</small>
Calanoida (ci-ciii)	0.0%	26.4% <small>(n=362)</small>	0.0%	0.0%	0.0%	2.1% <small>(n=1)</small>	0.0%	16.7% <small>(n=1)</small>	0.0%	0.0%	0.0%	3.8% <small>(n=12)</small>
Calanus spp.	0.0%	0.1% <small>(n=1)</small>	0.0%	100.0% <small>(n=1)</small>	0.0%	2.1% <small>(n=1)</small>	0.0%	0.0%	0.0%	25.0% <small>(n=1)</small>	50.0% <small>(n=1)</small>	0.6% <small>(n=2)</small>
Cirripedia (larvae)	0.0%	1.9% <small>(n=26)</small>	0.0%	0.0%	0.0%	10.6% <small>(n=5)</small>	0.0%	0.0%	0.0%	25.0% <small>(n=1)</small>	0.0%	1.6% <small>(n=5)</small>
Copepoda (nauplii)	0.0%	7.2% <small>(n=98)</small>	0.0%	0.0%	0.0%	2.1% <small>(n=1)</small>	0.0%	0.0%	50.0% <small>(n=1)</small>	0.0%	0.0%	6.9% <small>(n=22)</small>
Echinodermata (larvae)	0.0%	0.0%	0.0%	0.0%	0.0%	2.1% <small>(n=1)</small>	0.0%	0.0%	0.0%	0.0%	0.0%	0.9% <small>(n=3)</small>
Euphausiacea (nauplii)	0.0%	0.5% <small>(n=7)</small>	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Evadne spp.	0.0%	3.5% <small>(n=48)</small>	50.0% <small>(n=1)</small>	0.0%	0.0%	25.5% <small>(n=12)</small>	0.0%	0.0%	0.0%	0.0%	0.0%	30.5% <small>(n=97)</small>
Fritillaria spp.	0.0%	1.3% <small>(n=18)</small>	0.0%	0.0%	0.0%	19.1% <small>(n=9)</small>	0.0%	0.0%	0.0%	25.0% <small>(n=1)</small>	0.0%	2.8% <small>(n=9)</small>
Gastropoda (larvae/Limacina)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	8.8% <small>(n=28)</small>
Harpacticoida- epibenthic	0.0%	0.4% <small>(n=5)</small>	0.0%	0.0%	0.0%	0.0%	0.0%	33.3% <small>(n=2)</small>	0.0%	0.0%	0.0%	0.3% <small>(n=1)</small>
Microcalanus spp.	0.0%	0.2% <small>(n=3)</small>	50.0% <small>(n=1)</small>	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Obelia spp. (medusa)	77.8% <small>(n=7)</small>	0.0%	0.0%	0.0%	0.0%	23.4% <small>(n=11)</small>	0.0%	0.0%	0.0%	25.0% <small>(n=1)</small>	0.0%	0.0%
Oikopleura spp.	11.1% <small>(n=1)</small>	0.1% <small>(n=2)</small>	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Oithona spp.	0.0%	10.9% <small>(n=150)</small>	0.0%	0.0%	0.0%	0.0%	0.0%	16.7% <small>(n=1)</small>	0.0%	0.0%	0.0%	3.1% <small>(n=10)</small>
Podon/Pleopsis spp.	0.0%	0.3% <small>(n=4)</small>	0.0%	0.0%	100.0% <small>(n=1)</small>	4.3% <small>(n=2)</small>	0.0%	0.0%	0.0%	0.0%	0.0%	11.3% <small>(n=36)</small>
Polychaeta (larvae)	11.1% <small>(n=1)</small>	0.5% <small>(n=7)</small>	0.0%	0.0%	0.0%	6.4% <small>(n=3)</small>	0.0%	0.0%	0.0%	0.0%	0.0%	7.9% <small>(n=25)</small>
Pseudocalanus spp.	0.0%	11.9% <small>(n=163)</small>	0.0%	0.0%	0.0%	0.0%	0.0%	16.7% <small>(n=1)</small>	0.0%	0.0%	0.0%	3.5% <small>(n=11)</small>
Temora spp.	0.0%	9.9% <small>(n=135)</small>	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9% <small>(n=3)</small>



Extra training classes

Aglantha spp. (medusa) n=9
Calanoida (civ-vi) n=1370
Cyclopoida (unid) n=2
Decapoda (unid) n=1
Foraminifera n=1
Hydrozoa (medusa) n=47
Monstrillidae n=1
Oncaeidae spp. n=6
Ostracoda n=2
Sarsia spp. (medusa) n=4
Tortanus spp. n=2
Zooplankton (unid) n=318

Actual discarded Taxa

Relative Abundance of Top Taxonomic Instances per Sample

