

Use of SCN features: Yes
Max learning objects: 20000 objects/class
Strategy N° 6

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

Confusion Matrix - In percent of Actual Value

Classification Report Matrix
max 20000 learning objects per class

Actual Values

	Acartia spp.	81%	<1%	6%	5%	1%		<1%	2%	<1%	3%				<1%	<1%	<1%					<1%				<1%		<1%		<1%	
	Evadne spp.	<1%	88%	<1%	<1%	<1%	<1%	4%	<1%			<1%	1%	4%	<1%	<1%			<1%								2%	<1%	<1%		
	Temora spp.	19%	2%	58%	6%	2%	<1%	<1%	5%		4%								<1%		2%						<1%		<1%		<1%
	Pseudocalanus spp.	31%		13%	47%				3%		4%					<1%			<1%	<1%	2%						<1%				
	Oithona spp.	19%	<1%	<1%		73%			<1%	<1%	1%	<1%				3%					<1%						<1%				
	Bryozoa (larvae)		31%	<1%		<1%	48%	2%	1%			<1%		7%	<1%	<1%			1%								4%	2%			
	Podon/Pleopsis spp.	<1%	15%	23%	2%			25%	4%	<1%	<1%		<1%	1%					9%		1%					4%	11%		<1%		
	Calanoida (ci-ciui)	20%	14%	14%	4%	4%		12%	20%		2%								<1%	<1%						<1%	7%	<1%			<1%
	Oikopleura spp.	<1%		3%	2%	2%				70%	<1%					12%		2%								7%					
	Centropages spp.	10%		3%	1%						78%											5%			2%						
	Echinodermata (larvae)	2%				18%		2%	2%	2%		12%				50%			2%						2%	6%		2%			
Gastropoda (larvae/Limacina)			2%				2%						68%	4%		15%			9%												
	Hydrozoa (medusa)						2%	9%					2%		28%		6%				2%				4%	9%		38%			
	Harpacticoida- epibenthic	47%	2%	6%	9%	4%			4%						21%					4%								2%			
	Bivalvia (larvae)						5%	5%					5%	7%		70%											9%				
	Fritillaria spp.					9%					29%						62%														
	Microcalanus spp.	6%	16%	10%	13%			13%	32%									6%								3%					
	Chaetognatha										39%								54%	4%	4%										
	Polychaeta (larvae)	5%			5%	5%		15%	5%					5%						30%				5%	25%						
	Calanus spp.				14%						7%										79%										
	Eurytemora spp.	30%		20%	20%						30%																				
	Aglantha spp. (medusa)												33%							44%				11%			11%				
	Oncaeidae spp.	50%												50%																	
	Sarsia spp. (medusa)														25%					25%									50%		
	Ostracoda						100%																								
	Tortanus spp.										50%											50%									
	Monstrillidae	100%																													
Decapoda-non brachyura (larvae)																					100%										
	Acartia spp.																														
	Evadne spp.																														
	Temora spp.																														
	Pseudocalanus spp.																														
	Oithona spp.																														
	Bryozoa (larvae)																														
	Podon/Pleopsis spp.																														
	Calanoida (ci-ciui)																														
	Oikopleura spp.																														
	Centropages spp.																														
	Echinodermata (larvae)																														
	Gastropoda (larvae/Limacina)																														
	Hydrozoa (medusa)																														
	Harpacticoida- epibenthic																														
	Bivalvia (larvae)																														
	Fritillaria spp.																														
	Microcalanus spp.																														
	Chaetognatha																														
	Polychaeta (larvae)																														
	Calanus spp.																														
	Eurytemora spp.																														
	Aglantha spp. (medusa)																														
	Oncaeidae spp.																														
	Sarsia spp. (medusa)																														
	Ostracoda																														
	Tortanus spp.																														
	Monstrillidae																														
	Decapoda-non brachyura (larvae)																														
	Acartia spp.																														
	Evadne spp.																														
	Temora spp.																														
	Pseudocalanus spp.																														
	Oithona spp.																														
	Bryozoa (larvae)																														
	Podon/Pleopsis spp.																														
	Calanoida (ci-ciui)																														
	Oikopleura spp.																														
	Centropages spp.																														
	Echinodermata (larvae)																														
	Gastropoda (larvae/Limacina)																														
	Hydrozoa (medusa)																														
	Harpacticoida- epibenthic																														
	Bivalvia (larvae)																														
	Fritillaria spp.																														
	Microcalanus spp.																														
	Chaetognatha																														
	Polychaeta (larvae)																														
	Calanus spp.																														
	Eurytemora spp.																														
	Aglantha spp. (medusa)																														
	Oncaeidae spp.																														
	Sarsia spp. (medusa)																														
	Ostracoda																														
	Tortanus spp.																														
	Monstrillidae																														
	Decapoda-non brachyura (larvae)																														
	Acartia spp.																														
	Evadne spp.																														

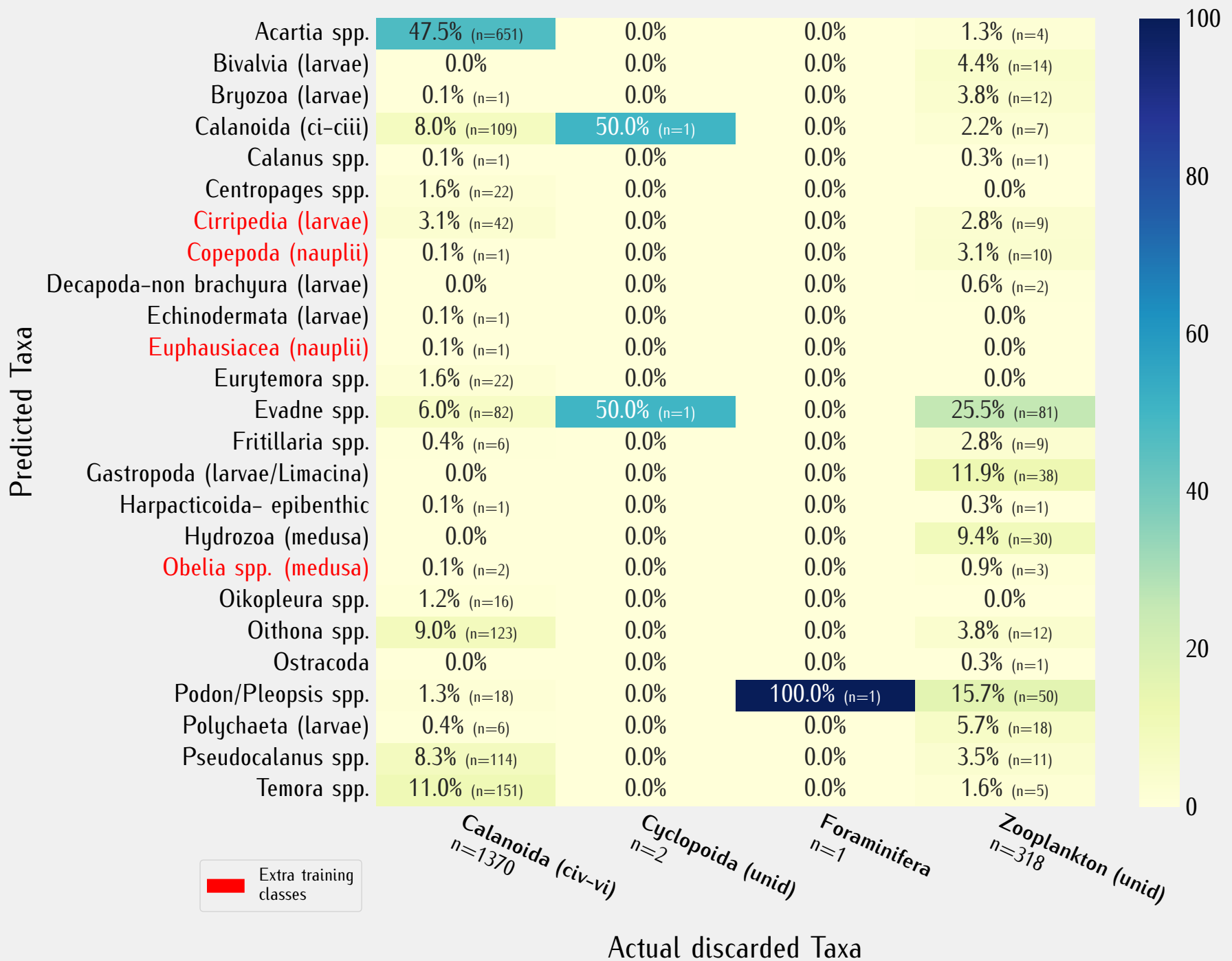
Predicted Values

Extra
training
classes

	precision	recall	f1-score
Acartia spp. (n=2490-train=20000)	0.73	0.81	0.77
Evadne spp. (n=1931-train=11064)	0.90	0.88	0.89
Temora spp. (n=1416-train=7347)	0.69	0.58	0.63
Pseudocalanus spp. (n=1044-train=4845)	0.67	0.47	0.55
Oithona spp. (n=345-train=5881)	0.76	0.73	0.74
Bryozoa (larvae) (n=248-train=1142)	0.94	0.48	0.64
Podon/Pleopsis spp. (n=230-train=7347)	0.34	0.25	0.29
Calanoida (ci-ciü) (n=130-train=5557)	0.13	0.20	0.16
Oikopleura spp. (n=115-train=5305)	0.74	0.70	0.72
Centropages spp. (n=88-train=3620)	0.27	0.78	0.40
Echinodermata (larvae) (n=50-train=3043)	0.60	0.12	0.20
Gastropoda (larvae/Limacina) (n=47-train=3272)	0.55	0.68	0.61
Hydrozoa (medusa) (n=47-train=4052)	0.11	0.28	0.16
Harpacticoida- epibenthic (n=47-train=555)	0.62	0.21	0.32
Bivalvia (larvae) (n=44-train=3764)	0.78	0.70	0.74
Fritillaria spp. (n=34-train=6992)	0.25	0.62	0.35
Microcalanus spp. (n=31-train=80)	0.40	0.06	0.11
Chaetognatha (n=28-train=89)	0.88	0.54	0.67
Polychaeta (larvae) (n=20-train=1577)	0.15	0.30	0.20
Calanus spp. (n=14-train=359)	0.69	0.79	0.73
Eurytemora spp. (n=10-train=1818)	0.00	0.00	0.00
Aglantha spp. (medusa) (n=9-train=22)	0.67	0.44	0.53
Oncaeidae spp. (n=6-train=18)	0.00	0.00	0.00
Sarsia spp. (medusa) (n=4-train=4)	0.00	0.00	0.00
Ostracoda (n=2-train=25)	0.00	0.00	0.00
Tortanus spp. (n=2-train=203)	0.17	0.50	0.25
Monstrillidae (n=1-train=27)	0.00	0.00	0.00
Decapoda-non brachyura (larvae) (n=1-train=423)	0.00	0.00	0.00
Cirripedia (larvae) (n=0-train=7685)	-	-	-
Copepoda (nauplii) (n=0-train=11555)	-	-	-
Obelia spp. (medusa) (n=0-train=1003)	-	-	-
Euphausiacea (larvae) (n=0-train=87)	-	-	-
Euphausiacea (nauplii) (n=0-train=145)	-	-	-
macro avg (corr)	0.43	0.40	0.38
weighted avg	0.73	0.69	0.70
	precision	recall	f1-score



Predictions of discarded taxa from training



Relative Abundance of Top Taxonomic Instances per Sample

