

Use of SCN features: Yes
Max learning objects: Maximum objects/class
Strategy N° 3

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

Confusion Matrix – In percent of Actual Value

Actual Values																				
	Acartia spp.	Evadne spp.	Temora spp.	Pseudocalanus spp.	Oithona spp.	Bryozoa (larvae)	Podon/Pleopsis spp.	Calanoida (ci-ciii)	Oikopleura spp.	Centropages spp.	Echinodermata (larvae)	Harpacticoida- epibenthic	Gastropoda (larvae/Limacina)	Bivalvia (larvae)	Fritillaria spp.	Microcalanus spp.	Chaetognatha	Polychaeta (larvae)	Calanus spp.	Eurytemora spp.
	73%	<1%	7%	9%	3%			8%					<1%			<1%				
		95%	<1%	<1%	<1%		2%	1%						<1%	<1%	<1%			<1%	
	14%	2%	55%	8%	3%		<1%	17%				<1%				<1%				
	24%		14%	53%	<1%			8%				<1%				<1%	<1%		<1%	<1%
	12%	1%	1%		79%	<1%		3%			<1%				2%					
		56%				37%	<1%	3%			<1%		2%		1%				<1%	
	1%	17%	20%	3%			18%	17%							<1%	<1%		23%		
	12%	14%	8%	7%	4%		4%	50%								<1%			<1%	
			2%	4%	3%	<1%			60%		<1%				27%		<1%		2%	
	69%		7%	5%						17%	1%								1%	
	4%				20%			8%	2%		20%				46%					
	32%		6%	13%	9%			15%				26%								
		9%					13%						60%	11%				9%		
						5%	2%						18%	75%						
					15%				3%		3%				79%					
		13%	3%	13%				61%								6%		3%		
									36%						14%		50%			
		15%	5%	5%	5%			20%										50%		
	7%			21%															71%	
	50%		20%	30%																

Predicted Values

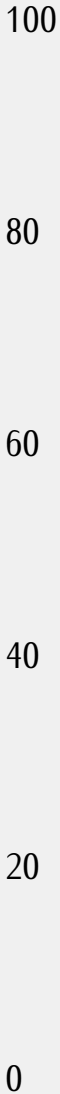
Classification Report Matrix
max available learning objects per class

	precision	recall	f1-score
Acartia spp. (n=2490–train=5448)	0.75	0.73	0.74
Evadne spp. (n=1931–train=2845)	0.88	0.95	0.91
Temora spp. (n=1416–train=5148)	0.66	0.55	0.60
Pseudocalanus spp. (n=1044–train=4552)	0.59	0.53	0.56
Oithona spp. (n=345–train=1409)	0.66	0.79	0.72
Bryozoa (larvae) (n=248–train=119)	0.96	0.37	0.53
Podon/Pleopsis spp. (n=230–train=201)	0.44	0.18	0.26
Calanoida (ci-ciii) (n=130–train=3713)	0.09	0.50	0.16
Oikopleura spp. (n=115–train=761)	0.85	0.60	0.70
Centropages spp. (n=88–train=40)	1.00	0.17	0.29
Echinodermata (larvae) (n=50–train=276)	0.67	0.20	0.31
Harpacticoida- epibenthic (n=47–train=136)	0.75	0.26	0.38
Gastropoda (larvae/Limacina) (n=47–train=110)	0.47	0.60	0.53
Bivalvia (larvae) (n=44–train=71)	0.82	0.75	0.79
Fritillaria spp. (n=34–train=3447)	0.25	0.79	0.39
Microcalanus spp. (n=31–train=80)	0.29	0.06	0.11
Chaetognatha (n=28–train=67)	0.93	0.50	0.65
Polychaeta (larvae) (n=20–train=452)	0.14	0.50	0.22
Calanus spp. (n=14–train=213)	0.62	0.71	0.67
Eurytemora spp. (n=10–train=88)	0.00	0.00	0.00
macro avg	0.59	0.49	0.48
weighted avg	0.73	0.68	0.69
	precision	recall	f1-score

Predictions of discarded taxa from training

Predicted Taxa

Acartia spp.	0.0%	24.6% _(n=337)	0.0%	0.0%	0.0%	0.0%	100.0% _(n=1)	16.7% _(n=1)	0.0%	0.0%	50.0% _(n=1)	0.6% _(n=2)
Bivalvia (larvae)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	8.5% _(n=27)
Bryozoa (larvae)	0.0%	0.0%	0.0%	0.0%	0.0%	2.1% _(n=1)	0.0%	0.0%	50.0% _(n=1)	0.0%	0.0%	2.5% _(n=8)
Calanoida (ci-ciii)	0.0%	31.4% _(n=430)	50.0% _(n=1)	0.0%	0.0%	2.1% _(n=1)	0.0%	16.7% _(n=1)	0.0%	0.0%	0.0%	7.9% _(n=25)
Calanus spp.	33.3% _(n=3)	0.1% _(n=1)	0.0%	100.0% _(n=1)	0.0%	10.6% _(n=5)	0.0%	0.0%	0.0%	25.0% _(n=1)	50.0% _(n=1)	0.6% _(n=2)
Echinodermata (larvae)	0.0%	0.1% _(n=1)	0.0%	0.0%	0.0%	6.4% _(n=3)	0.0%	0.0%	0.0%	0.0%	0.0%	0.6% _(n=2)
Evadne spp.	0.0%	5.3% _(n=72)	50.0% _(n=1)	0.0%	0.0%	27.7% _(n=13)	0.0%	0.0%	50.0% _(n=1)	0.0%	0.0%	41.2% _(n=131)
Fritillaria spp.	0.0%	1.7% _(n=23)	0.0%	0.0%	0.0%	21.3% _(n=10)	0.0%	0.0%	0.0%	25.0% _(n=1)	0.0%	3.8% _(n=12)
Gastropoda (larvae/Limacina)	0.0%	0.0%	0.0%	0.0%	100.0% _(n=1)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	8.2% _(n=26)
Harpacticoida- epibenthic	0.0%	0.1% _(n=1)	0.0%	0.0%	0.0%	0.0%	0.0%	33.3% _(n=2)	0.0%	0.0%	0.0%	0.0%
Microcalanus spp.	0.0%	0.1% _(n=1)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Oikopleura spp.	11.1% _(n=1)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Oithona spp.	0.0%	11.3% _(n=155)	0.0%	0.0%	0.0%	0.0%	0.0%	16.7% _(n=1)	0.0%	0.0%	0.0%	2.5% _(n=8)
Podon/Pleopsis spp.	0.0%	0.5% _(n=7)	0.0%	0.0%	0.0%	4.3% _(n=2)	0.0%	0.0%	0.0%	0.0%	0.0%	10.4% _(n=33)
Polychaeta (larvae)	55.6% _(n=5)	0.4% _(n=6)	0.0%	0.0%	0.0%	23.4% _(n=11)	0.0%	0.0%	0.0%	50.0% _(n=2)	0.0%	8.8% _(n=28)
Pseudocalanus spp.	0.0%	13.6% _(n=187)	0.0%	0.0%	0.0%	0.0%	0.0%	16.7% _(n=1)	0.0%	0.0%	0.0%	3.1% _(n=10)
Temora spp.	0.0%	10.9% _(n=149)	0.0%	0.0%	0.0%	2.1% _(n=1)	0.0%	0.0%	0.0%	0.0%	0.0%	1.3% _(n=4)
Aglantha spp. (medusa) n=9												
Calanoida spp. (medusa) n=1370												
Cyclopoida (civ-vi) n=2												
Cyclopoida (unid) n=1												
Decapoda-non brachyura (larvae) n=1												
Foraminifera n=1												
Hydrozoa (medusa) n=47												
Monstrillidae n=1												
Oncaeidae n=6												
Ostracoda n=2												
Sarsia spp. n=4												
Tortanus spp. (medusa) n=2												
Zooplankton (unid) n=318												



Actual discarded Taxa

Relative Abundance of Top Taxonomic Instances per Sample

