

Use of SCN features: Yes
Max learning objects: 200 objects/class
Strategy N° 8

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

Confusion Matrix – In percent of Actual Value

Classification Report Matrix
max 200 learning objects per class

Actual Values

Decapoda	Acartia spp.	40%	<1%	4%	15%	2%		<1%	<1%	9%			1%			<1%	2%		<1%		12%	6%		<1%		<1%	3%	3%	
	Evadne spp.		76%		<1%	<1%	1%	4%	<1%		<1%	1%	<1%	11%			1%		<1%		<1%			3%	<1%	<1%		<1%	
	Temora spp.	10%	2%	35%	10%	4%	<1%		<1%		7%		<1%				4%		<1%		14%	3%	<1%	<1%		<1%	1%	8%	
	Pseudocalanus spp.	18%		7%	43%	<1%			<1%		10%			1%			4%		<1%	<1%	11%	<1%	1%			<1%	2%	1%	
	Oithona spp.	12%	<1%		1%	72%				<1%	2%	<1%		1%							3%	2%		<1%		<1%	<1%	3%	
	Bryozoa (larvae)		20%				52%	1%	<1%	<1%		<1%	<1%	8%	7%		1%	<1%		1%					3%	2%			
	Podon/Pleopsis spp.	<1%	10%	10%	1%	<1%	<1%	5%		<1%	<1%		<1%	<1%			28%		16%		5%		10%	5%		4%		2%	
	Calanoida (ci–cii)	10%	11%	2%	4%	5%	2%	5%			4%			3%			23%		2%	<1%	6%	2%	2%	10%				10%	
	Oikopleura spp.	<1%			<1%	2%				37%		<1%					7%		37%		2%	<1%	3%	5%			<1%	3%	
	Centropages spp.	6%		2%							66%											17%	3%					6%	
	Echinodermata (larvae)	8%				26%		2%		4%	2%	14%				28%			2%			6%	2%	2%	2%	2%		2%	2%
	Gastropoda (larvae/Limacina)							2%					60%		13%	11%				15%									
	Harpacticoida– epibenthic	6%	2%	4%	13%	4%								38%	2%		2%				15%						9%	4%	
	Hydrozoa (medusa)		2%	4%		2%	4%				2%			21%		4%	2%			4%					4%		49%		
	Bivalvia (larvae)						2%					9%		9%	68%											11%			
	Fritillaria spp.					18%				38%		3%				41%													
	Microcalanus spp.		10%		3%												58%		6%		16%	3%							3%
	Chaetognatha									11%			4%					82%		4%									
	Polychaeta (larvae)		5%			5%						10%	5%	5%			10%		20%		5%	5%	5%	20%					5%
	Calanus spp.																			93%		7%							
Eurytemora spp.				30%						30%											10%						30%		
Tortanus spp.																				50%		50%							
Decapoda–non brachyura (larvae)																				100%									

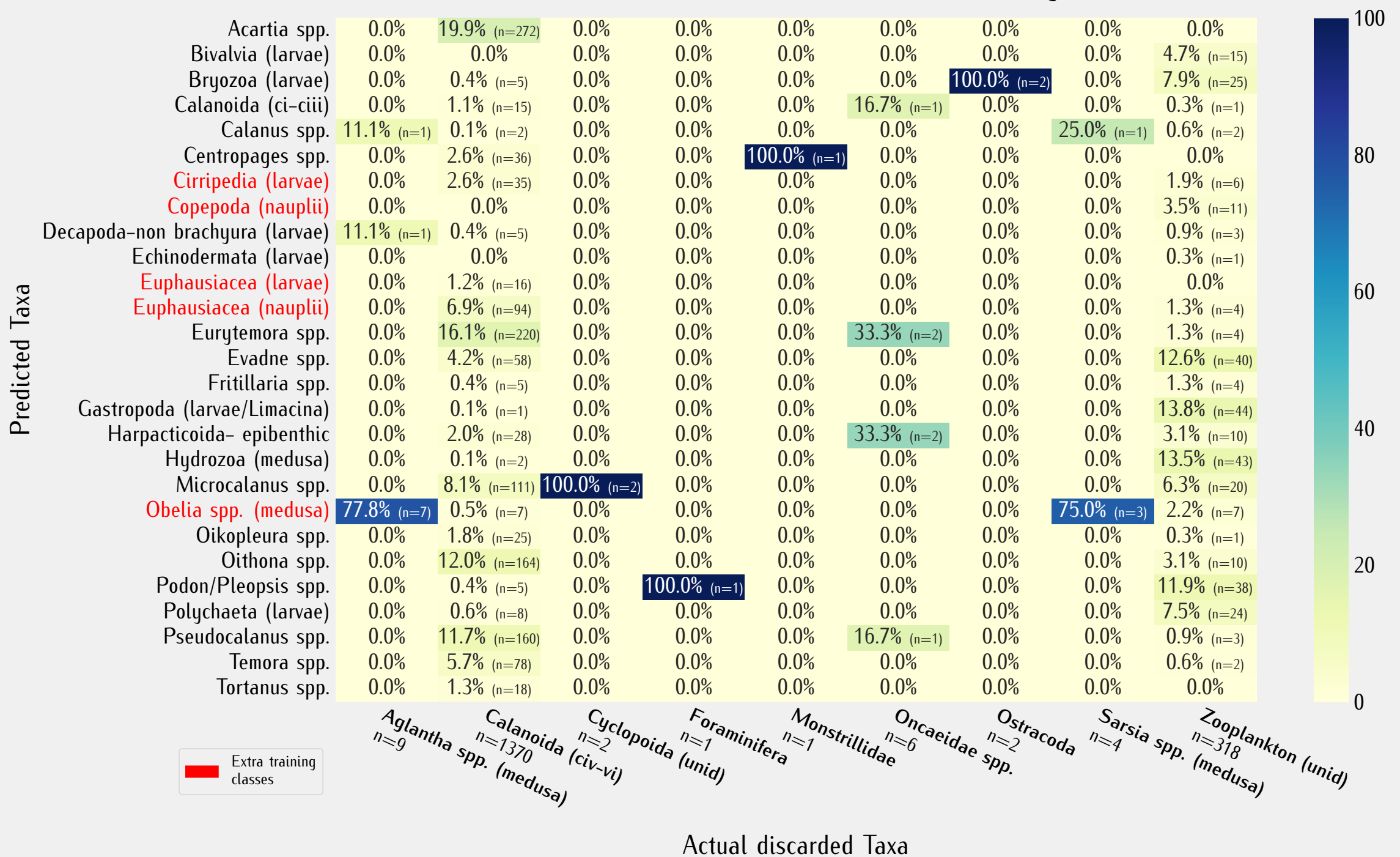
Acartia spp.
Evadne spp.
Temora spp.
Pseudocalanus spp.
Oithona spp.
Bryozoa (larvae)
Podon/Pleopsis spp.
Calanoida (ci-ciii)
Oikopleura spp.
Centropages spp.
Echinodermata (larvae)
Gastropoda (larvae/Limacina)
Harpacticoida- epibenthic
Hydrozoa (medusa)
Bivalvia (larvae)
Fritillaria spp.
Microcalanus spp.
Chaetognatha
Polychaeta (larvae)
Calanus spp.
Eurytemora spp.
Tortanus spp.
Decapoda-non brachyura (larvae)
Cirripedia (larvae)
Copepoda (nauplii)
Obelia spp. (medusa)
Euphausiacea (larvae)
Euphausiacea (nauplii)

Extra
training
classes

	precision	recall	f1-score
Acartia spp. (n=2490-train=200)	0.72	0.40	0.52
Evadne spp. (n=1931-train=200)	0.92	0.76	0.83
Temora spp. (n=1416-train=200)	0.70	0.35	0.46
Pseudocalanus spp. (n=1044-train=200)	0.45	0.43	0.44
Oithona spp. (n=345-train=200)	0.63	0.72	0.67
Bryozoa (larvae) (n=248-train=200)	0.80	0.52	0.63
Podon/Pleopsis spp. (n=230-train=200)	0.10	0.05	0.07
Calanoida (ci-ciii) (n=130-train=200)	0.00	0.00	0.00
Oikopleura spp. (n=115-train=200)	0.56	0.37	0.44
Centropages spp. (n=88-train=200)	0.12	0.66	0.20
Echinodermata (larvae) (n=50-train=200)	0.41	0.14	0.21
Gastropoda (larvae/Limacina) (n=47-train=200)	0.48	0.60	0.53
Harpacticoida- epibenthic (n=47-train=200)	0.17	0.38	0.23
Hydrozoa (medusa) (n=47-train=200)	0.04	0.21	0.07
Bivalvia (larvae) (n=44-train=200)	0.86	0.68	0.76
Fritillaria spp. (n=34-train=200)	0.33	0.41	0.36
Microcalanus spp. (n=31-train=80)	0.06	0.58	0.11
Chaetognatha (n=28-train=89)	0.35	0.82	0.49
Polychaeta (larvae) (n=20-train=200)	0.06	0.20	0.09
Calanus spp. (n=14-train=200)	0.52	0.93	0.67
Eurytemora spp. (n=10-train=200)	0.00	0.10	0.00
Tortanus spp. (n=2-train=200)	0.00	0.50	0.01
Decapoda-non brachyura (larvae) (n=1-train=200)	0.00	0.00	0.00
Cirripedia (larvae) (n=0-train=200)	-	-	-
Copepoda (nauplii) (n=0-train=200)	-	-	-
Obelia spp. (medusa) (n=0-train=200)	-	-	-
Euphausiacea (larvae) (n=0-train=87)	-	-	-
Euphausiacea (nauplii) (n=0-train=145)	-	-	-
macro avg (corr)	0.36	0.43	0.34
weighted avg	0.67	0.48	0.55
	precision	recall	f1-score



Predictions of discarded taxa from training



Relative Abundance of Top Taxonomic Instances per Sample

