

Use of SCN features: No
Max learning objects: 20000 objects/class
Strategy N° 6

NL 2020 Selected Samples prediction using all regions training set,
Learning with all classes present in the selected samples, with extra regional training categories,
No Anthoathecata, Calanoida, Copepoda, Zooplankton classes in learning set

Confusion Matrix – In percent of Actual Value

Classification Report Matrix
max 20000 learning objects per class

Actual Values

Temora spp.	56%	16%	3%	13%	2%	<1%	3%	<1%	<1%			<1%	<1%				<1%			<1%	<1%			<1%	3%	1%	<1%	<1%		<1%			
	21%	63%	1%	5%	2%	<1%	1%		1%		<1%	<1%					<1%			<1%	<1%				2%	1%	<1%	<1%	<1%	<1%			
Acartia spp.	<1%	<1%	84%	<1%		5%	<1%	1%	<1%	<1%		2%	<1%		<1%			<1%	<1%					<1%	<1%	4%		<1%					
Evadne spp.	29%	21%	<1%	39%	4%		4%		<1%			<1%	<1%		<1%		<1%	<1%							2%	<1%		<1%		<1%			
Pseudocalanus spp.	10%	4%		1%	84%													<1%	<1%														
Centropages spp.	25%	<1%	8%	4%		16%	<1%					<1%					5%	3%	27%					<1%	3%	7%		<1%					
Podon/Pleopsis spp.	8%	24%	6%	2%		<1%	48%		3%																6%	1%				<1%			
Eurytemora spp.			<1%			21%		60%		7%		3%									5%				<1%	2%							
Gastropoda (larvae/Limacina)		7%					1%		85%							1%	2%								2%	2%							
Oithona spp.								4%		93%		2%																					
Bivalvia (larvae)					1%					77%			1%	4%		9%		7%															
Oikopleura spp.	5%		5%									28%		2%		11%	2%		41%	6%					2%								
Hydrozoa (medusa)	8%	36%		22%			2%					28%						2%							2%								
Harpacticoida- epibenthic				4%	4%								76%				16%																
Calanus spp.				7%							7%			87%																			
Chaetognatha																																	
Chiridius spp.	7%			43%									14%				36%																
Aglantha spp. (medusa)													10%		50%			40%															
Fritillaria spp.		29%														57%	14%																
Echinodermata (larvae)			20%			20%											20%								20%	20%							
Metridia spp.				50%										50%																			
Decapoda-non brachyura (larvae)														50%				50%															
Cnidaria (larvae)	50%																								50%								
Obelia spp. (medusa)																		100%															
Polychaeta (larvae)				100%																													
Amphipoda													100%																				
Tomopteris spp.										100%																							
	Temora spp.	Acartia spp.	Evadne spp.	Pseudocalanus spp.	Centropages spp.	Podon/Pleopsis spp.	Eurytemora spp.	Gastropoda (larvae/Limacina)	Oithona spp.	Bivalvia (larvae)	Oikopleura spp.	Hydrozoa (medusa)	Harpacticoida- epibenthic	Calanus spp.	Chaetognatha	Chiridius spp.	Aglantha spp. (medusa)	Fritillaria spp.	Echinodermata (larvae)	Metridia spp.	Decapoda-non brachyura (larvae)	Cnidaria (larvae)	Obelia spp. (medusa)	Polychaeta (larvae)	Amphipoda	Tomopteris spp.	Bryozoa spp.	Calanoida (larvae)	Cirripedia (larvae)	Copepoda (larvae)	Microcalanus spp.	Euphausiacea spp.	Euphausiacea spp.

Predicted Values

Extra
training
classes

	precision	recall	f1-score
Temora spp. (n=18103–train=7347)	0.73	0.56	0.63
Acartia spp. (n=13302–train=20000)	0.70	0.63	0.66
Evadne spp. (n=5228–train=11064)	0.85	0.84	0.85
Pseudocalanus spp. (n=3053–train=4845)	0.29	0.39	0.33
Centropages spp. (n=330–train=3620)	0.28	0.84	0.42
Podon/Pleopsis spp. (n=253–train=7347)	0.09	0.16	0.11
Eurytemora spp. (n=178–train=1818)	0.09	0.48	0.15
Gastropoda (larvae/Limacina) (n=112–train=3272)	0.49	0.60	0.54
Oithona spp. (n=98–train=5881)	0.20	0.85	0.32
Bivalvia (larvae) (n=92–train=3764)	0.91	0.93	0.92
Oikopleura spp. (n=70–train=5305)	0.84	0.77	0.81
Hydrozoa (medusa) (n=64–train=4052)	0.13	0.28	0.17
Harpacticoida- epibenthic (n=50–train=555)	0.15	0.28	0.20
Calanus spp. (n=25–train=359)	0.66	0.76	0.70
Chaetognatha (n=15–train=89)	0.81	0.87	0.84
Chiridius spp. (n=14–train=1)	0.00	0.00	0.00
Aglantha spp. (medusa) (n=10–train=22)	0.42	0.50	0.45
Fritillaria spp. (n=7–train=6992)	0.07	0.57	0.12
Echinodermata (larvae) (n=5–train=3043)	0.00	0.00	0.00
Metridia spp. (n=2–train=16)	0.00	0.00	0.00
Decapoda-non brachyura (larvae) (n=2–train=423)	0.03	0.50	0.05
Cnidaria (larvae) (n=2–train=25)	0.00	0.00	0.00
Obelia spp. (medusa) (n=1–train=1003)	0.01	1.00	0.02
Polychaeta (larvae) (n=1–train=1577)	0.00	0.00	0.00
Amphipoda (n=1–train=27)	0.00	0.00	0.00
Tomopteris spp. (n=1–train=1)	0.00	0.00	0.00
Bryozoa (larvae) (n=0–train=1142)	–	–	–
Calanoida (ci-ciii) (n=0–train=5557)	–	–	–
Cirripedia (larvae) (n=0–train=7685)	–	–	–
Copepoda (nauplii) (n=0–train=11555)	–	–	–
Microcalanus spp. (n=0–train=80)	–	–	–
Euphausiacea (larvae) (n=0–train=87)	–	–	–
Euphausiacea (nauplii) (n=0–train=145)	–	–	–
macro avg (corr)	0.30	0.45	0.32
weighted avg	0.69	0.61	0.64
	precision	recall	f1-score

1.0

0.8

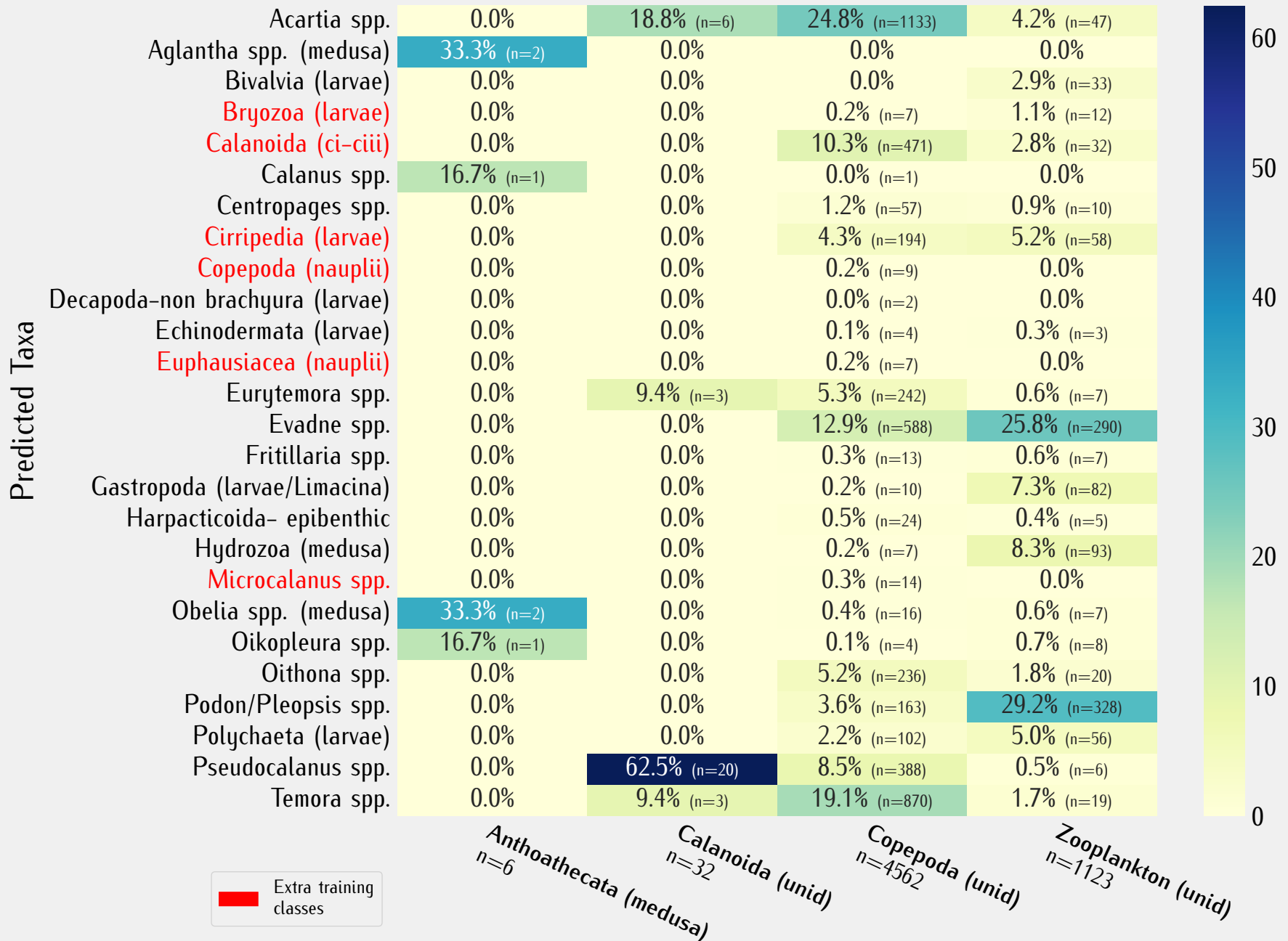
0.6

0.4

0.2

0.0

Predictions of discarded taxa from training



Actual discarded Taxa

Relative Abundance of Top Taxonomic Instances per Sample

