

Use of SCN features: Yes
Max learning objects: 5000 objects/class
Strategy N° 2

PA Selected Samples prediction using PA training set,
Learning with all classes present in the selected samples, with extra training categories,
No Calanoida (ci-vi), Cyclopoida, Zooplankton classes in learning set

Confusion Matrix – In percent of Actual Value

Classification Report Matrix
max 5000 learning objects per class

Actual Values

Cirripedia (larvae)	74%	1%	<1%	15%	<1%	2%		<1%	<1%	<1%	<1%	<1%	<1%		1%	1%	1%		<1%	<1%				<1%	<1%		<1%
Acartia spp.	1%	79%	<1%	<1%	<1%	<1%	6%	<1%	10%					<1%		<1%	<1%		<1%		<1%	<1%	<1%				
Oikopleura spp.	2%	2%	82%	2%	2%	1%	<1%	<1%	1%		<1%	<1%	<1%	<1%	2%	3%	<1%	<1%	<1%		<1%	<1%	<1%				<1%
Podon/Pleopsis spp.	10%	2%	<1%	51%	<1%	12%	1%	2%	12%		<1%	2%	3%		<1%	2%							2%				<1%
Fritillaria spp.	<1%	7%	52%	<1%	32%	2%	<1%		<1%		<1%	<1%		4%	<1%				<1%								
Evadne spp.	7%	1%	<1%	12%		66%		<1%	5%		<1%		6%		1%	<1%		<1%					<1%				<1%
Corycaeidae	<1%	15%	2%	1%		1%	70%	<1%	5%		<1%		<1%		1%	<1%		<1%			<1%						
Calanoida (ci-ciüi)	17%	16%	<1%	15%	<1%	5%	11%	10%	9%			3%			10%								3%				<1%
Paracalanus spp.	<1%	7%	<1%	1%		1%	<1%		82%				<1%	<1%		<1%	<1%			1%	2%						
Gastropoda (larvae/Limacina)	7%	5%		44%		3%	<1%	2%	2%	23%	9%	2%	<1%		<1%								2%				
Bivalvia (larvae)				11%		1%				1%	77%												1%				8%
Polychaeta (larvae)	23%	9%		17%		5%	3%		9%			18%	5%		2%	2%	3%		5%								
Hydrozoa (medusa)			2%	2%		4%			4%					85%		4%											
Centropages spp.		26%	4%				2%					2%		24%			6%	12%	14%		2%	8%					
Echinodermata (larvae)	2%			17%	2%	50%			2%			17%			7%							2%					
Calycophorae (nectophore)											3%	8%			78%	5%		5%									
Decapoda-brachyura (zoeae)									6%				3%		6%	81%		3%									
Ctenophora (larvae)	3%			16%		13%					6%	48%			3%		10%										
Decapoda-non brachyura (larvae)		4%				4%						12%				12%		69%									
Ostracoda				4%		44%	4%				16%								4%								28%
Tortanus spp.	4%	8%												8%		25%	17%	12%	25%								
Ascidiaacea (larvae)			65%																	35%							
Oithona spp.		59%	12%		12%								12%					6%									
Pseudocalanus spp.									29%						14%			14%			43%						
Calanus spp.													17%					17%				17%	50%				
Copepoda (nauplii)	25%			50%				25%																			
Euphysa spp. (medusa)															100%												
Bryozoa (larvae)	100%																										

Predicted Values

Extra
training
classes

	precision	recall	f1-score
Cirripedia (larvae) (n=3231–train=5000)	0.92	0.74	0.82
Acartia spp. (n=2290–train=4410)	0.88	0.79	0.83
Oikopleura spp. (n=1773–train=4507)	0.82	0.82	0.82
Podon/Pleopsis spp. (n=607–train=3605)	0.31	0.51	0.39
Fritillaria spp. (n=475–train=844)	0.78	0.32	0.46
Evadne spp. (n=358–train=981)	0.52	0.66	0.58
Corycaeidae (n=335–train=1760)	0.57	0.70	0.63
Calanoida (ci-ciüi) (n=150–train=313)	0.28	0.10	0.15
Paracalanus spp. (n=141–train=1525)	0.22	0.82	0.35
Gastropoda (larvae/Limacina) (n=126–train=291)	0.83	0.23	0.36
Bivalvia (larvae) (n=96–train=119)	0.76	0.77	0.77
Polychaeta (larvae) (n=65–train=661)	0.24	0.18	0.21
Hydrozoa (medusa) (n=55–train=301)	0.31	0.85	0.46
Centropages spp. (n=50–train=119)	0.32	0.24	0.27
Echinodermata (larvae) (n=42–train=2649)	0.00	0.00	0.00
Calycophorae (nectophore) (n=37–train=966)	0.19	0.78	0.31
Decapoda-brachyura (zoeae) (n=32–train=343)	0.22	0.81	0.35
Ctenophora (larvae) (n=31–train=29)	0.60	0.10	0.17
Decapoda-non brachyura (larvae) (n=26–train=219)	0.46	0.69	0.55
Ostracoda (n=25–train=18)	0.07	0.04	0.05
Tortanus spp. (n=24–train=88)	0.22	0.25	0.24
Ascidiaacea (larvae) (n=23–train=54)	0.89	0.35	0.50
Oithona spp. (n=17–train=44)	0.00	0.00	0.00
Pseudocalanus spp. (n=7–train=65)	0.30	0.43	0.35
Calanus spp. (n=6–train=37)	0.25	0.50	0.33
Copepoda (nauplii) (n=4–train=233)	0.00	0.00	0.00
Euphysa spp. (medusa) (n=3–train=3)	0.00	0.00	0.00
Bryozoa (larvae) (n=1–train=50)	0.00	0.00	0.00
Harpacticoida- epibenthic (n=0–train=47)	–	–	–
Platyhelminthes/Nemertea (larvae) (n=0–train=145)	–	–	–
macro avg (corr)	0.39	0.42	0.36
weighted avg	0.77	0.70	0.72
	precision	recall	f1-score

0.8

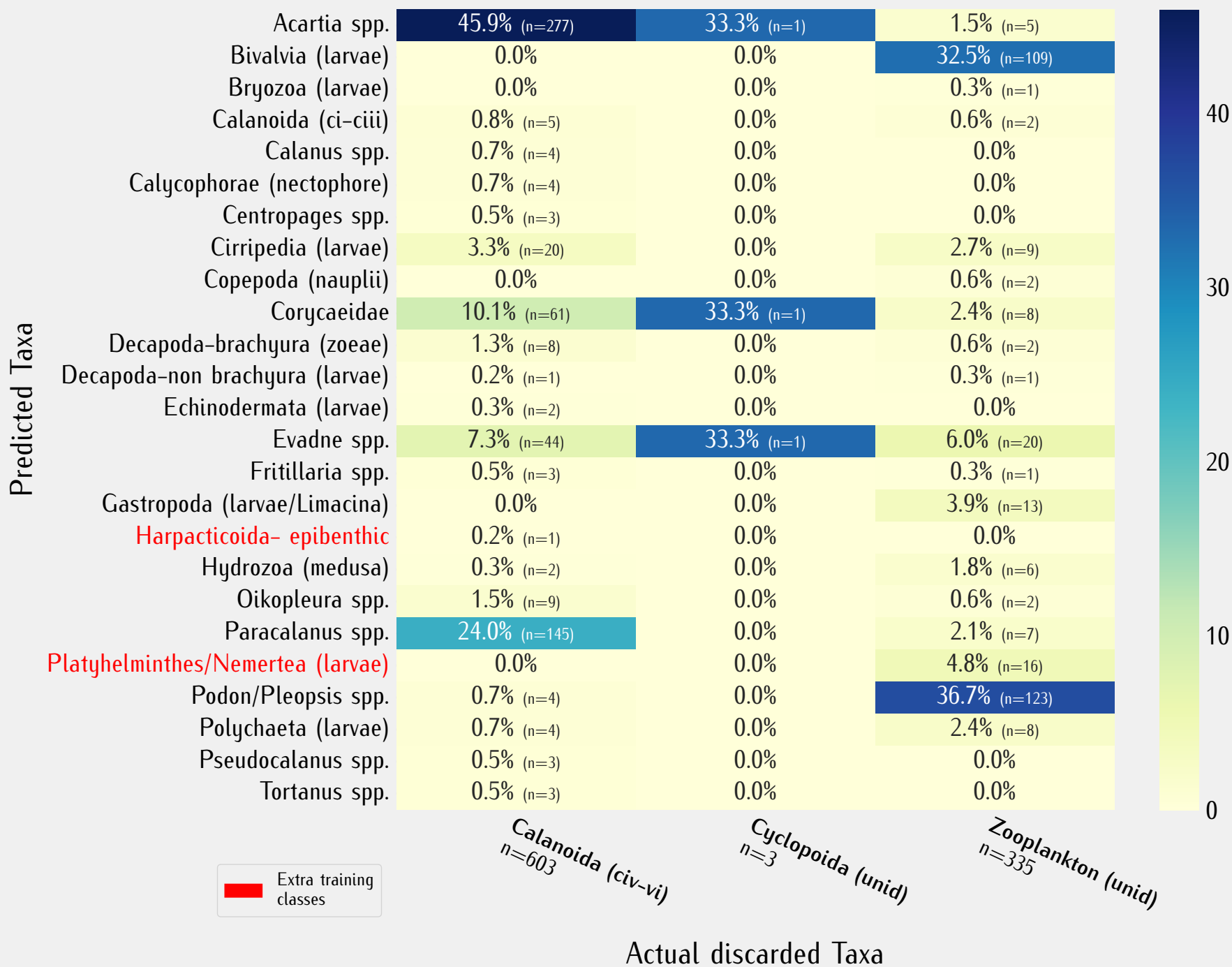
0.6

0.4

0.2

0.0

Predictions of discarded taxa from training



Relative Abundance of Top Taxonomic Instances per Sample

