

Use of SCN features: No  
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)	77%	1%	<1%	13%	<1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%		1%	1%	1%			<1%				<1%	<1%		<1%
Acartia spp.	1%	79%	<1%	<1%	<1%	<1%	6%	<1%	9%			<1%		<1%	<1%	<1%	<1%			<1%		<1%	<1%				
Oikopleura spp.	2%	2%	81%	2%	2%	2%	<1%	<1%	1%			<1%	<1%	<1%	2%	3%	<1%	<1%	<1%	<1%			<1%	<1%			<1%
Podon/Pleopsis spp.	9%	1%	<1%	53%		11%	<1%	3%	10%			3%	3%		<1%	<1%	1%					<1%	3%				<1%
Fritillaria spp.	<1%	5%	45%		42%	2%	<1%		<1%			<1%	<1%		4%					<1%	<1%						<1%
Evadne spp.	6%	1%	<1%	9%		69%	1%		4%		<1%		5%		1%	<1%		<1%				<1%					<1%
Corycaeidae	<1%	13%	2%	1%		<1%	70%	1%	6%			<1%		<1%		<1%	<1%		<1%	<1%							<1%
Calanoida (ci-ciüi)	15%	16%	<1%	14%		5%	10%	13%	8%			3%			9%							4%		1%			1%
Paracalanus spp.	<1%	9%	<1%	1%		2%	<1%		77%			<1%	<1%				<1%				4%	2%					<1%
Gastropoda (larvae/Limacina)	7%	5%		35%		4%		2%	2%	31%	8%	2%	<1%		<1%								3%				
Bivalvia (larvae)				8%		1%				4%	75%												1%				10%
Polychaeta (larvae)	25%	5%		15%		5%	3%	3%	3%			25%	5%		2%	2%		6%					2%	2%			
Hydrozoa (medusa)			2%	2%		4%			4%			2%	80%		5%	2%											
Centropages spp.		22%	4%				2%					2%		18%		20%	12%	14%		2%	4%						
Echinodermata (larvae)				17%	2%	50%		2%				12%		10%		5%					2%						
Calycophorae (nectophore)											3%	8%		78%	8%	3%											
Decapoda-brachyura (zoeae)	3%	6%						3%				3%	3%	6%	62%	12%											
Ctenophora (larvae)	3%			10%		13%				19%	48%			3%		3%											
Decapoda-non brachyura (larvae)		4%										15%			8%	69%											4%
Ostracoda						40%						12%	4%					8%									36%
Tortanus spp.	4%	4%												12%	12%	29%			38%								
Ascidiaacea (larvae)			48%																52%								
Oithona spp.		47%	12%		12%		6%					12%					6%			6%							
Pseudocalanus spp.									14%			14%			14%	14%				43%							
Calanus spp.												17%			33%	33%						17%					
Copepoda (nauplii)				25%				25%															50%				
Euphysa spp. (medusa)												33%		67%													
Bryozoa (larvae)	100%																										

Extra  
training  
classes

	precision	recall	f1-score
Cirripedia (larvae) (n=3231-train=5000)	0.93	0.77	0.84
Acartia spp. (n=2290-train=4410)	0.89	0.79	0.83
Oikopleura spp. (n=1773-train=4507)	0.84	0.81	0.82
Podon/Pleopsis spp. (n=607-train=3605)	0.36	0.53	0.42
Fritillaria spp. (n=475-train=844)	0.80	0.42	0.55
Evadne spp. (n=358-train=981)	0.53	0.69	0.60
Corycaeidae (n=335-train=1760)	0.56	0.70	0.62
Calanoida (ci-ciüi) (n=150-train=313)	0.24	0.13	0.17
Paracalanus spp. (n=141-train=1525)	0.23	0.77	0.36
Gastropoda (larvae/Limacina) (n=126-train=291)	0.70	0.31	0.43
Bivalvia (larvae) (n=96-train=119)	0.74	0.75	0.75
Polychaeta (larvae) (n=65-train=661)	0.24	0.25	0.24
Hydrozoa (medusa) (n=55-train=301)	0.32	0.80	0.46
Centropages spp. (n=50-train=119)	0.23	0.18	0.20
Echinodermata (larvae) (n=42-train=2649)	0.00	0.00	0.00
Calycophorae (nectophore) (n=37-train=966)	0.20	0.78	0.32
Decapoda-brachyura (zoeae) (n=32-train=343)	0.18	0.62	0.28
Ctenophora (larvae) (n=31-train=29)	0.20	0.03	0.06
Decapoda-non brachyura (larvae) (n=26-train=219)	0.42	0.69	0.52
Ostracoda (n=25-train=18)	0.12	0.08	0.10
Tortanus spp. (n=24-train=88)	0.30	0.38	0.33
Ascidiaacea (larvae) (n=23-train=54)	0.71	0.52	0.60
Oithona spp. (n=17-train=44)	0.07	0.06	0.06
Pseudocalanus spp. (n=7-train=65)	0.14	0.43	0.21
Calanus spp. (n=6-train=37)	0.17	0.17	0.17
Copepoda (nauplii) (n=4-train=233)	0.03	0.50	0.06
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)	0.36	0.43	0.36
weighted avg	0.78	0.71	0.73
	precision	recall	f1-score

0.8

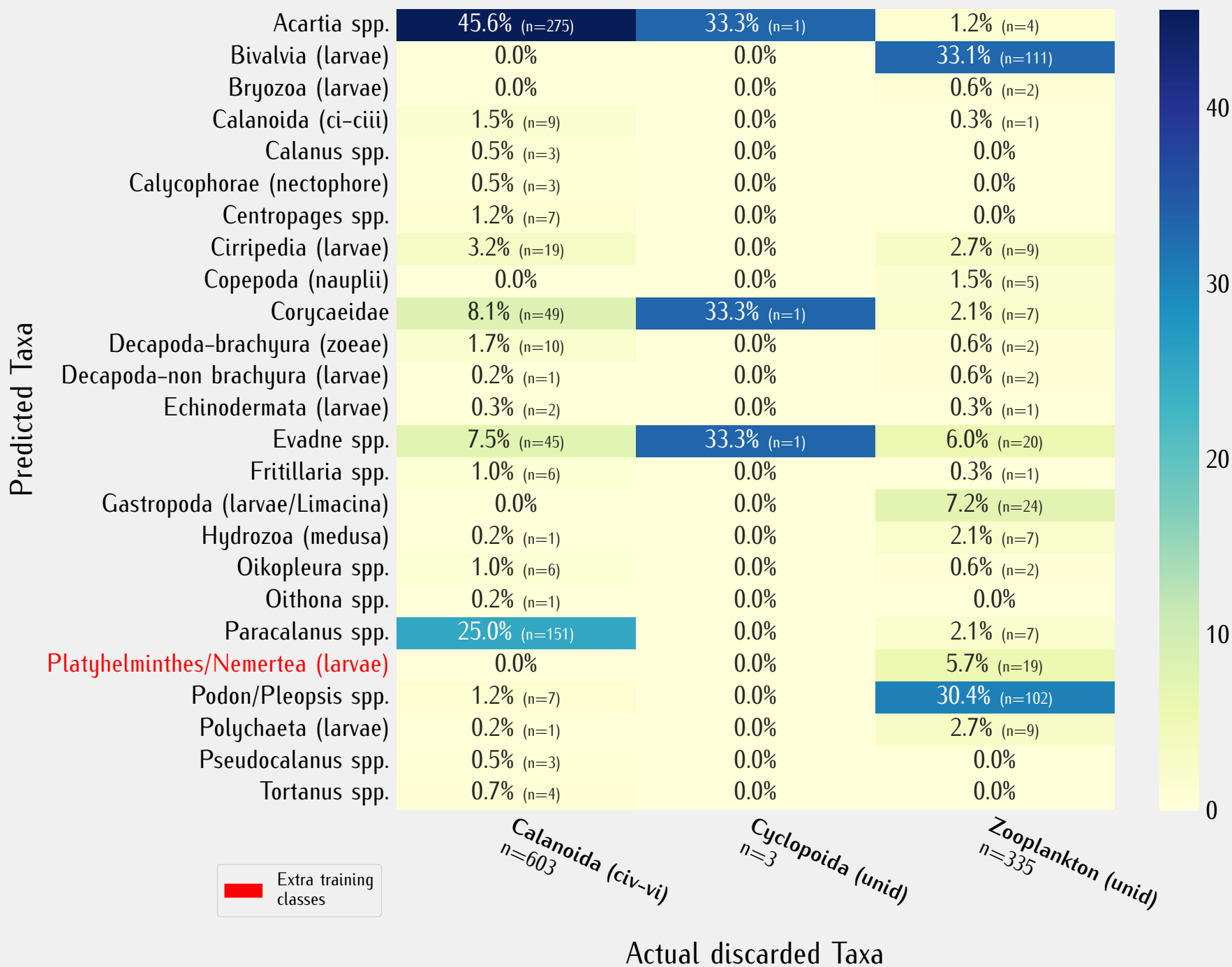
0.6

0.4

0.2

0.0

# Predictions of discarded taxa from training



Relative Abundance of Top Taxonomic Instances per Sample

