

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

PA 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 (civ-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

Gastropoda (larvae/Limacina)	Cirripedia (larvae)	51%	<1%	<1%	11%	<1%	12%	<1%	<1%	2%	2%	<1%	<1%	1%	<1%	3%	1%	4%	<1%	<1%	4%		3%	<1%		<1%	2%			1%
	Acartia spp.	<1%	15%	<1%	<1%	<1%	<1%	23%	<1%	31%					2%		<1%	<1%			3%	<1%	13%	8%				2%		
	Oikopleura spp.	<1%	<1%	61%	<1%	18%	2%	<1%	<1%	2%			<1%	<1%	<1%	2%	3%	<1%	<1%	<1%	<1%	1%	1%	<1%		<1%	<1%	<1%	2%	
	Podon/Pleopsis spp.	12%		<1%	25%		25%	<1%	<1%	15%	1%		4%	2%	<1%		<1%	<1%	4%	<1%	<1%		1%	<1%		<1%	6%	<1%	1%	
	Fritillaria spp.	<1%	2%	26%		45%	1%	4%		<1%			<1%	1%		5%	<1%				<1%	1%	11%			<1%		1%	<1%	
	Evadne spp.	4%		<1%	5%		45%	1%	<1%	7%	1%	<1%	<1%	17%		1%	<1%		6%				<1%			<1%	3%	<1%	5%	
	Corycaeidae	<1%	5%	1%	1%		1%	67%		8%			1%		1%		<1%			<1%	1%	1%	4%			<1%	3%	<1%		
	Calanoida (ci-ciii)	11%	3%		9%		19%	10%	3%	9%			5%			7%							10%			2%	5%	7%	<1%	
	Paracalanus spp.		2%			<1%		<1%		58%					<1%				<1%		2%			33%			<1%	<1%	<1%	
	Bivalvia (larvae)				19%		11%			4%	46%	2%	<1%	2%					<1%			3%				2%	3%		4%	
	Polychaeta (larvae)	11%	5%		9%		11%	3%		8%	2%		11%	5%		2%		5%	6%	5%		3%	14%		2%				2%	
	Hydrozoa (medusa)									4%				25%	2%		16%	2%	49%	2%										
	Centropages spp.		10%	2%				2%		4%					28%		2%			8%	20%			18%	6%					
	Echinodermata (larvae)					2%	7%			2%				71%			2%		7%	5%						2%				
	Calycophorae (nectophore)					3%									5%		68%		3%	14%				5%	3%					
	Decapoda-brachyura (zoeae)		6%							3%					9%		3%	59%	3%	6%	3%			6%						
	Ctenophora (larvae)	3%					3%							26%			3%		48%							10%			6%	
	Decapoda-non brachyura (larvae)							4%								4%			8%	69%					12%				4%	
	Tortanus spp.														25%		12%	4%		4%	50%		4%							
	Ascidacea (larvae)			26%		9%																65%								
Oithona spp.		29%			18%		6%												6%	6%		29%					6%			
Pseudocalanus spp.																				14%			86%							
Calanus spp.														17%						67%			17%							
Copepoda (nauplii)	25%									25%															50%					
Bryozoa (larvae)												100%																		

Predicted Values

Extra
training
classes

	precision	recall	f1-score
Cirripedia (larvae) (n=3231-train=200)	0.92	0.51	0.66
Acartia spp. (n=2290-train=200)	0.80	0.15	0.25
Oikopleura spp. (n=1773-train=200)	0.88	0.61	0.72
Podon/Pleopsis spp. (n=607-train=200)	0.25	0.25	0.25
Fritillaria spp. (n=475-train=200)	0.38	0.45	0.41
Evadne spp. (n=358-train=200)	0.20	0.45	0.27
Corycaeidae (n=335-train=200)	0.28	0.67	0.39
Calanoida (ci-ciii) (n=150-train=200)	0.24	0.03	0.05
Paracalanus spp. (n=141-train=200)	0.08	0.58	0.14
Gastropoda (larvae/Limacina) (n=126-train=200)	0.41	0.46	0.43
Bivalvia (larvae) (n=96-train=200)	0.91	0.61	0.73
Polychaeta (larvae) (n=65-train=200)	0.10	0.11	0.11
Hydrozoa (medusa) (n=55-train=200)	0.07	0.25	0.11
Centropages spp. (n=50-train=200)	0.16	0.28	0.20
Echinodermata (larvae) (n=42-train=200)	0.00	0.00	0.00
Calycophorae (nectophore) (n=37-train=200)	0.16	0.68	0.26
Decapoda-brachyura (zoeae) (n=32-train=200)	0.12	0.59	0.19
Ctenophora (larvae) (n=31-train=42)	0.14	0.48	0.21
Decapoda-non brachyura (larvae) (n=26-train=200)	0.32	0.69	0.43
Tortanus spp. (n=24-train=200)	0.05	0.50	0.09
Ascidacea (larvae) (n=23-train=200)	0.37	0.65	0.47
Oithona spp. (n=17-train=200)	0.01	0.29	0.02
Pseudocalanus spp. (n=7-train=200)	0.02	0.86	0.04
Calanus spp. (n=6-train=200)	0.00	0.00	0.00
Copepoda (nauplii) (n=4-train=200)	0.04	0.50	0.08
Bryozoa (larvae) (n=1-train=200)	0.00	0.00	0.00
Harpacticoida- epibenthic (n=0-train=200)	-	-	-
Platyhelminthes/Nemertea (larvae) (n=0-train=183)	-	-	-
macro avg (corr)	0.26	0.41	0.25
weighted avg	0.71	0.42	0.48
	precision	recall	f1-score

0.8

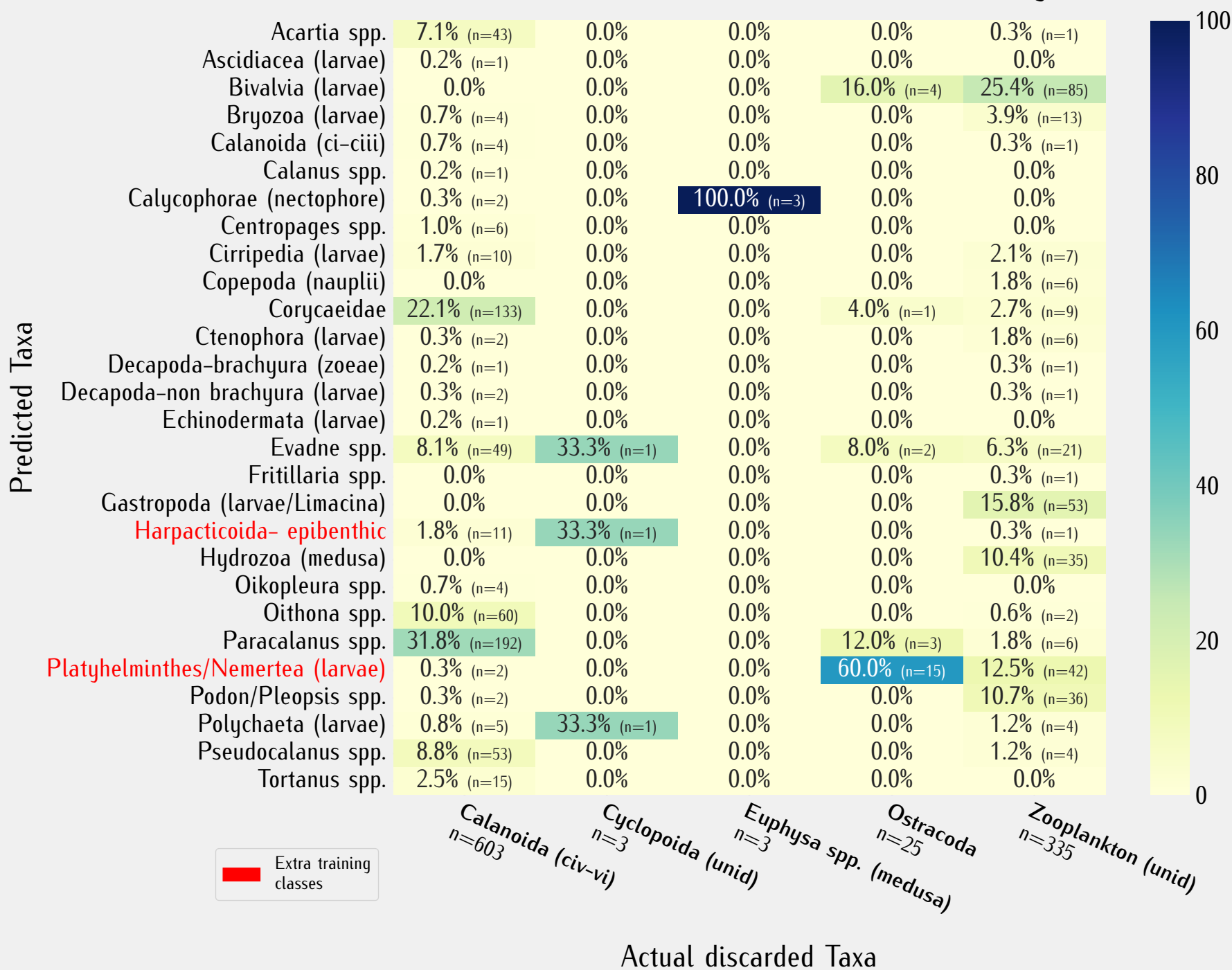
0.6

0.4

0.2

0.0

Predictions of discarded taxa from training



Relative Abundance of Top Taxonomic Instances per Sample

