

Use of SCN features: Yes
Max learning objects: 200 objects/class
Strategy N° 4

PA Selected Samples prediction using PA training set,
Learning with selected samples classes with no low regional training instances, 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 200 learning objects per class

Actual Values

Cirripedia (larvae)	55%	2%	<1%	8%	<1%	4%		3%	3%	3%	<1%	<1%	2%		3%	<1%	6%		2%		<1%	<1%	4%	<1%	<1%	<1%
Acartia spp.	<1%	41%	<1%		1%	<1%	20%	3%	15%			<1%		2%		<1%	<1%		2%		7%	5%	<1%		<1%	
Oikopleura spp.	<1%	1%	65%	<1%	8%	1%	<1%	1%	1%		<1%	<1%	<1%	2%	3%	4%		<1%	<1%	5%	<1%	<1%	<1%	<1%	<1%	2%
Podon/Pleopsis spp.	4%	<1%	<1%	17%	<1%	14%	<1%	13%	15%	1%	<1%	3%	9%	<1%		<1%	2%				<1%	<1%	16%	<1%		<1%
Fritillaria spp.	<1%	2%	29%		50%	2%	1%	<1%	1%				<1%		8%	<1%			4%	2%					<1%	<1%
Evadne spp.	6%	<1%	<1%	5%		65%	<1%	1%	6%	<1%	1%	<1%	7%		1%	<1%						<1%	1%			3%
Corycaeidae	<1%	5%	2%	<1%		<1%	66%	3%	8%			2%		<1%		<1%	<1%	<1%	1%		<1%	5%	<1%		1%	<1%
Calanoida (ci-ciii)	10%	5%		5%	3%	6%	7%	28%	5%			6%	<1%		9%					2%		9%	1%	1%	<1%	
Paracalanus spp.		2%				<1%	2%		57%			<1%	1%	2%					3%			31%				
Gastropoda (larvae/Limacina)	2%	2%		9%	2%	6%		4%	4%	48%	9%	<1%	2%							<1%		9%	2%			2%
Bivalvia (larvae)				2%				1%		6%	77%											1%				12%
Polychaeta (larvae)	14%	6%		8%		3%	3%	3%	6%	2%		14%	6%		2%		5%	5%	3%			12%	6%	3%		
Hydrozoa (medusa)					4%			4%					84%	2%		4%	2%					2%				
Centropages spp.		8%	2%				2%		2%					24%		2%	4%	16%	22%			16%			2%	
Echinodermata (larvae)				5%	2%	57%			2%			2%	21%			5%						5%				
Calycophorae (nectophore)					3%								8%	3%		70%	3%	8%	3%			3%				
Decapoda-brachyura (zoeae)							3%		3%				3%			3%	69%	9%	6%			3%				
Decapoda-non brachyura (larvae)							4%						15%				4%	73%								4%
Tortanus spp.		4%							4%					8%		17%	4%	12%	50%							
Ascidacea (larvae)			13%																	87%						
Oithona spp.		35%	6%		12%								12%				6%				24%				6%	
Pseudocalanus spp.														14%			14%	14%				57%				
Copepoda (nauplii)				25%				25%															50%			
Bryozoa (larvae)	100%																									
	Cirripedia (larvae)	Acartia spp.	Oikopleura spp.	Podon/Pleopsis spp.	Fritillaria spp.	Evadne spp.	Corycaeidae	Calanoida (ci-ciii)	Paracalanus spp.	Gastropoda (larvae/Limacina)	Bivalvia (larvae)	Polychaeta (larvae)	Hydrozoa (medusa)	Centropages spp.	Echinodermata (larvae)	Calycophorae (larvae)	Decapoda-brachyura (zoeae)	Decapoda-non brachyura (larvae)	Tortanus spp.	Ascidacea (larvae)	Oithona spp.	Pseudocalanus spp.	Copepoda (nauplii)	Bryozoa (larvae)	Haracticoida- e	Platy

Predicted Values

Extra
training
classes

	precision	recall	f1-score
Cirripedia (larvae) (n=3231-train=200)	0.95	0.55	0.70
Acartia spp. (n=2290-train=200)	0.86	0.41	0.56
Oikopleura spp. (n=1773-train=200)	0.87	0.65	0.74
Podon/Pleopsis spp. (n=607-train=200)	0.25	0.17	0.20
Fritillaria spp. (n=475-train=200)	0.54	0.50	0.52
Evadne spp. (n=358-train=200)	0.45	0.65	0.53
Corycaeidae (n=335-train=200)	0.31	0.66	0.42
Calanoida (ci-ciui) (n=150-train=200)	0.12	0.28	0.17
Paracalanus spp. (n=141-train=200)	0.11	0.57	0.18
Gastropoda (larvae/Limacina) (n=126-train=200)	0.33	0.48	0.39
Bivalvia (larvae) (n=96-train=119)	0.71	0.77	0.74
Polychaeta (larvae) (n=65-train=200)	0.14	0.14	0.14
Hydrozoa (medusa) (n=55-train=200)	0.21	0.84	0.34
Centropages spp. (n=50-train=119)	0.12	0.24	0.16
Echinodermata (larvae) (n=42-train=200)	0.00	0.00	0.00
Calycophorae (nectophore) (n=37-train=200)	0.16	0.70	0.26
Decapoda-brachyura (zoeae) (n=32-train=200)	0.09	0.69	0.16
Decapoda-non brachyura (larvae) (n=26-train=200)	0.40	0.73	0.52
Tortanus spp. (n=24-train=88)	0.07	0.50	0.12
Ascidiaacea (larvae) (n=23-train=54)	0.16	0.87	0.26
Oithona spp. (n=17-train=44)	0.02	0.24	0.04
Pseudocalanus spp. (n=7-train=65)	0.02	0.57	0.03
Copepoda (nauplii) (n=4-train=200)	0.01	0.50	0.01
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)	0.29	0.49	0.30
weighted avg	0.75	0.51	0.58
	precision	recall	f1-score

0.8

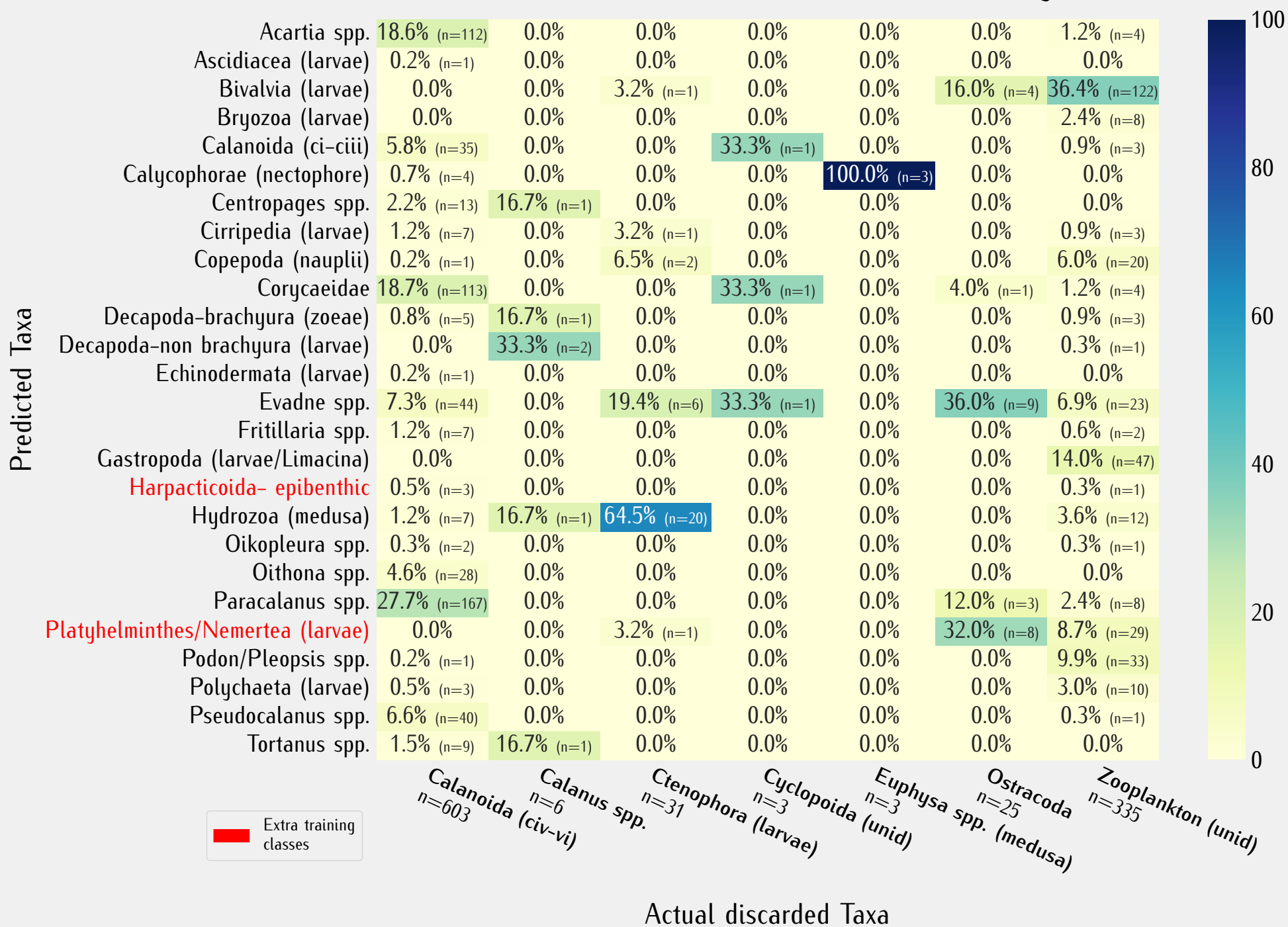
0.6

0.4

0.2

0.0

Predictions of discarded taxa from training



Relative Abundance of Top Taxonomic Instances per Sample

