

Use of SCN features: Yes
Max learning objects: 20000 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 20000 learning objects per class

Actual Values

Cirripedia (larvae)	71%	1%	<1%	12%	<1%	9%		<1%	<1%	1%		<1%	<1%	<1%	<1%	<1%		<1%		<1%	<1%		<1%		
Acartia spp.	<1%	57%	<1%	<1%	<1%	1%	11%	3%	6%			<1%	<1%		<1%	<1%		<1%		16%	2%				
Oikopleura spp.	<1%	2%	66%	2%	19%	3%	<1%	1%	<1%	<1%		<1%	<1%	<1%	2%			<1%	<1%	<1%	1%	<1%		<1%	<1%
Podon/Pleopsis spp.	9%	<1%	<1%	44%	<1%	31%	1%	2%	4%	1%		<1%	<1%	<1%		<1%	<1%			<1%	<1%		<1%	<1%	<1%
Fritillaria spp.	<1%	2%	20%		63%	1%	<1%	<1%	<1%			<1%	2%		2%				<1%	7%			<1%	<1%	<1%
Evadne spp.	4%		<1%	5%		74%	<1%	1%	2%	3%	<1%	<1%	6%		<1%	<1%			<1%			<1%	<1%		
Corycaeidae	<1%	19%	<1%	2%	<1%	1%	61%	1%	3%					2%		<1%		<1%		2%	3%		<1%	<1%	<1%
Calanoida (ci-ciii)	11%	5%	<1%	13%	<1%	17%	12%	15%	3%			1%			4%					14%			2%		1%
Paracalanus spp.	<1%	11%		<1%	<1%	4%		3%	51%					<1%							29%				
Gastropoda (larvae/Limacina)	2%	2%		17%		13%	<1%	<1%		52%	5%	<1%	<1%						3%			2%			
Bivalvia (larvae)				5%			1%			4%	82%		4%									2%			1%
Polychaeta (larvae)	18%	5%		12%		15%	2%	2%	2%	3%		26%				3%		5%			6%	2%			
Hydrozoa (medusa)		2%				7%		2%				9%	71%			5%		2%			2%				
Centropages spp.		22%	2%		4%									40%				2%	6%		18%	6%			
Echinodermata (larvae)					2%	5%						2%	86%			5%									
Calycophorae (nectophore)								3%				3%	3%	5%		76%		8%			3%				
Decapoda-brachyura (zoeae)		6%				3%		3%						9%		6%	62%		6%			3%			
Ctenophora (larvae)	3%			6%		19%				10%		16%	32%			3%		3%	3%				3%		
Decapoda-non brachyura (larvae)	4%					4%	4%					4%		4%			8%		65%			8%			
Tortanus spp.	8%	4%												38%		17%	4%		4%	21%		4%			
Ascidacea (larvae)			22%		17%															61%					
Oithona spp.		41%	6%		18%									6%							29%				
Pseudocalanus spp.																						100%			
Calanus spp.														17%				33%				33%	17%		
Copepoda (nauplii)				25%																			75%		
Bryozoa (larvae)	100%																								

Predicted Values

Extra
training
classes

	precision	recall	f1-score
Cirripedia (larvae) (n=3231-train=7685)	0.94	0.71	0.81
Acartia spp. (n=2290-train=20000)	0.87	0.57	0.69
Oikopleura spp. (n=1773-train=5305)	0.91	0.66	0.76
Podon/Pleopsis spp. (n=607-train=7347)	0.35	0.44	0.39
Fritillaria spp. (n=475-train=6992)	0.44	0.63	0.52
Evadne spp. (n=358-train=11064)	0.29	0.74	0.42
Corycaeidae (n=335-train=1760)	0.41	0.61	0.49
Calanoida (ci-ciui) (n=150-train=5557)	0.14	0.15	0.15
Paracalanus spp. (n=141-train=1619)	0.27	0.51	0.35
Gastropoda (larvae/Limacina) (n=126-train=3272)	0.46	0.52	0.49
Bivalvia (larvae) (n=96-train=3764)	0.91	0.82	0.86
Polychaeta (larvae) (n=65-train=1577)	0.33	0.26	0.29
Hydrozoa (medusa) (n=55-train=4052)	0.25	0.71	0.37
Centropages spp. (n=50-train=3620)	0.27	0.40	0.32
Echinodermata (larvae) (n=42-train=3043)	0.00	0.00	0.00
Calycophorae (nectophore) (n=37-train=966)	0.28	0.76	0.41
Decapoda-brachyura (zoeae) (n=32-train=628)	0.39	0.62	0.48
Ctenophora (larvae) (n=31-train=42)	1.00	0.03	0.06
Decapoda-non brachyura (larvae) (n=26-train=423)	0.49	0.65	0.56
Tortanus spp. (n=24-train=203)	0.50	0.21	0.29
Ascidiaacea (larvae) (n=23-train=861)	0.78	0.61	0.68
Oithona spp. (n=17-train=5881)	0.01	0.29	0.02
Pseudocalanus spp. (n=7-train=4845)	0.05	1.00	0.10
Calanus spp. (n=6-train=359)	0.17	0.17	0.17
Copepoda (nauplii) (n=4-train=11555)	0.06	0.75	0.12
Bryozoa (larvae) (n=1-train=1142)	0.00	0.00	0.00
Harpacticoida- epibenthic (n=0-train=555)	-	-	-
Platyhelminthes/Nemertea (larvae) (n=0-train=183)	-	-	-
macro avg (corr)	0.41	0.49	0.38
weighted avg	0.77	0.62	0.67
	precision	recall	f1-score

1.0

0.8

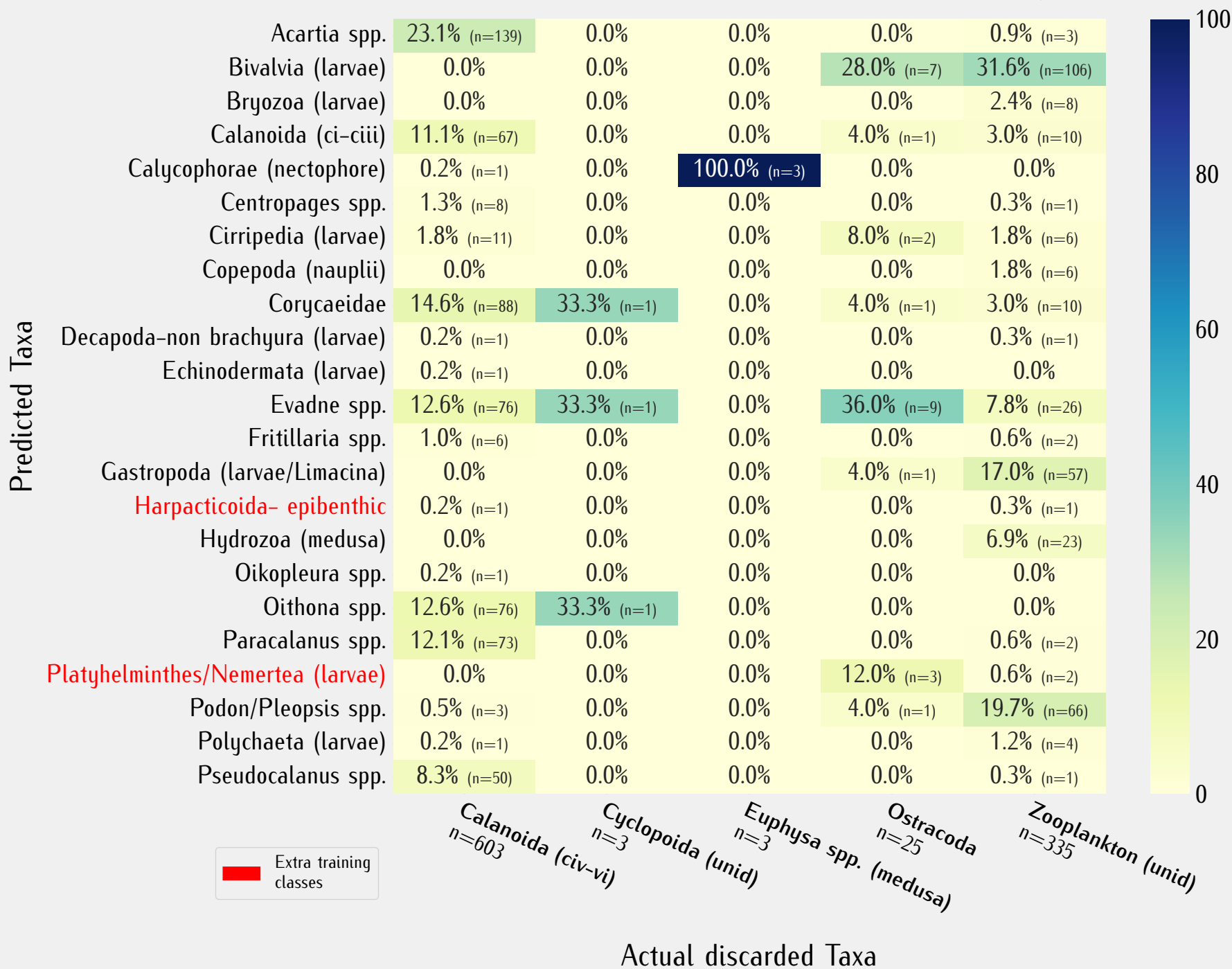
0.6

0.4

0.2

0.0

Predictions of discarded taxa from training



Relative Abundance of Top Taxonomic Instances per Sample

