PA Selected Samples prediction using all regions training set,
Learning with selected samples classes with no low global training instances, no extra training categories,
No Calanoida (civ-vi), Cyclopoida, Zooplankton classes in learning set
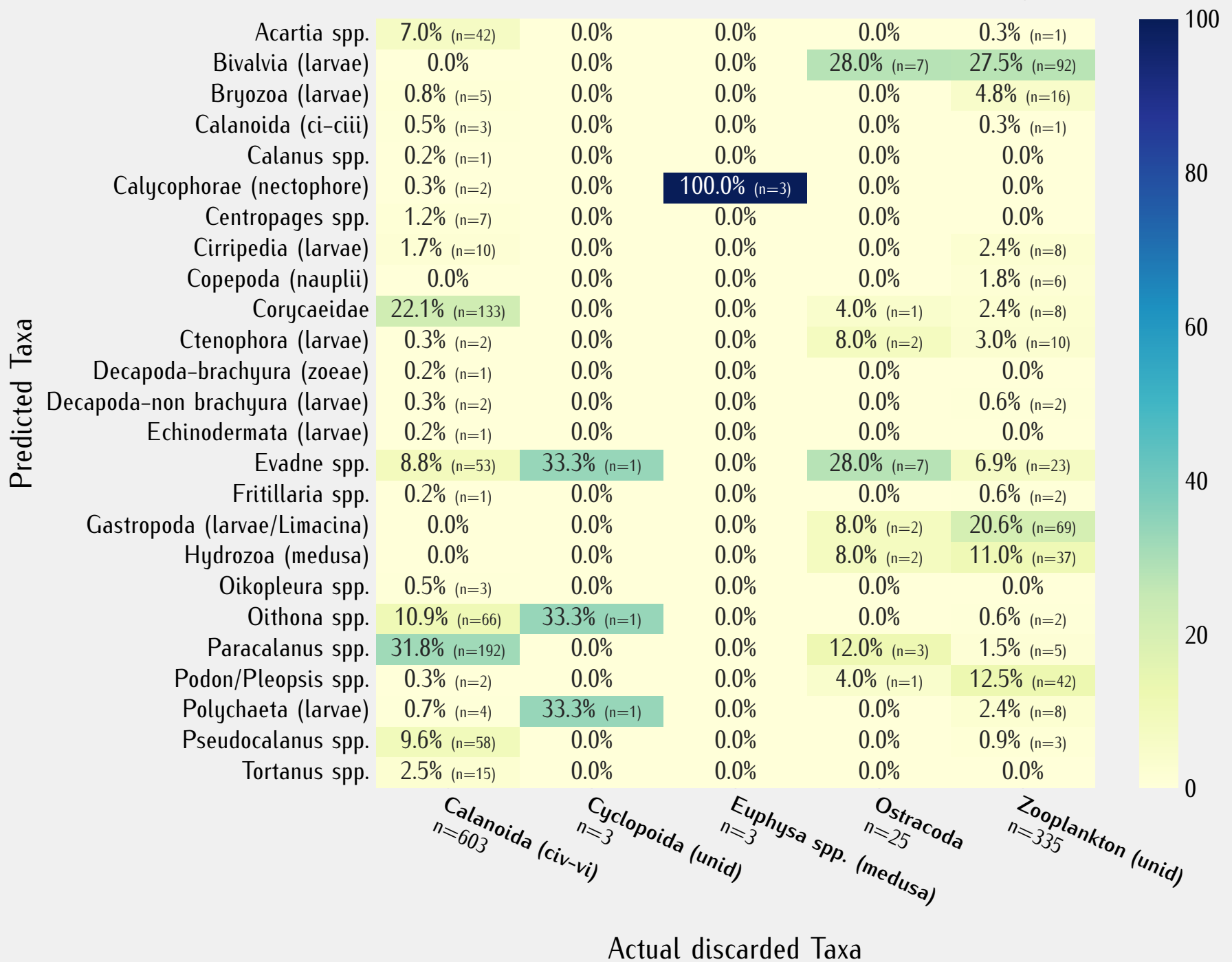
Use of SCN features: Yes
Max learning objects: 200 objects/class
Strategy N° 7

Confusion Matrix - In percent of Actual Value

Classification Report Matrix
max 200 learning objects per class

	precision	recall	f1-score
Cirripedia (larvae) (n=3231-train=200)	0.92	0.52	0.66
Acartia spp. (n=2290-train=200)	0.82	0.16	0.27
Oikopleura spp. (n=1773-train=200)	0.87	0.61	0.72
Podon/Pleopsis spp. (n=607-train=200)	0.24	0.24	0.24
Fritillaria spp. (n=475-train=200)	0.38	0.44	0.41
Evadne spp. (n=358-train=200)	0.19	0.44	0.27
Corycaeidae (n=335-train=200)	0.27	0.67	0.38
Calanoida (ci-ciii) (n=150-train=200)	0.12	0.01	0.02
Paracalanus spp. (n=141-train=200)	0.08	0.56	0.14
Gastropoda (larvae/Limacina) (n=126-train=200)	0.38	0.49	0.43
Bivalvia (larvae) (n=96-train=200)	0.89	0.73	0.80
Polychaeta (larvae) (n=65-train=200)	0.09	0.12	0.11
Hydrozoa (medusa) (n=55-train=200)	0.08	0.27	0.12
Centropages spp. (n=50-train=200)	0.19	0.30	0.23
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	0.62	0.21
Ctenophora (larvae) (n=31-train=42)	0.12	0.45	0.19
Decapoda-non brachyura (larvae) (n=26-train=200)	0.33	0.69	0.44
Tortanus spp. (n=24-train=200)	0.05	0.54	0.09
Ascidiacea (larvae) (n=23-train=200)	0.34	0.65	0.45
Oithona spp. (n=17-train=200)	0.01	0.35	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
macro avg	0.26	0.42	0.25
weighted avg	0.71	0.42	0.48

Actual Values / Predicted Values

Confusion Matrix (In percent of Actual Value):

Actual \ Predicted	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 (nectophore)	Decapoda-brachyura (zoeae)	Ctenophora (larvae)	Decapoda-non brachyura (larvae)	Tortanus spp.	Ascidiacea (larvae)	Oithona spp.	Pseudocalanus spp.	Calanus spp.	Copepoda (nauplii)	Bryozoa (larvae)
Cirripedia (larvae)	52%	<1%	<1%	11%	<1%	12%	<1%	<1%	2%	2%	<1%	<1%	2%	<1%	3%	1%	4%	<1%	<1%	4%		3%	<1%		<1%	2%
Acartia spp.	<1%	16%	<1%	<1%	<1%	<1%	24%	<1%	29%			<1%		2%		<1%	<1%			3%	<1%	15%	8%			
Oikopleura spp.	<1%	<1%	61%	<1%	19%	2%	<1%	<1%	1%	<1%		<1%	<1%	<1%	2%	3%		<1%	<1%	<1%	1%	2%			<1%	1%
Podon/Pleopsis spp.	12%	<1%	<1%	24%		26%	<1%	<1%	15%	2%		5%		<1%	<1%	<1%	1%		2%	<1%	<1%		1%	<1%		5%
Fritillaria spp.	<1%	2%	26%		44%	1%	4%	<1%	<1%			<1%		5%	<1%					<1%	1%	12%			<1%	<1%
Evadne spp.	4%		<1%	5%		44%	<1%	<1%	8%	1%	<1%	<1%	15%		1%	<1%		8%				<1%			<1%	8%
Corycaeidae	<1%	6%	1%	2%		<1%	67%		9%		2%			1%		<1%			<1%	2%	<1%	2%	5%			<1%
Calanoida (ci-ciii)	11%	3%		8%		22%	11%	1%	9%		7%		9%							12%				2%		5%
Paracalanus spp.		2%	<1%				<1%		56%			<1%		1%			1%		3%				34%			
Gastropoda (larvae/Limacina)	2%			19%		12%		4%	49%	2%	2%	2%				<1%			3%				2%	2%		
Bivalvia (larvae)				5%		1%			7%	73%		10%										1%	2%			
Polychaeta (larvae)	11%	5%		11%		15%	3%		8%	2%		12%		2%		3%	6%	5%			2%	15%	2%			
Hydrozoa (medusa)							4%			27%	2%		15%			49%	2%			2%						
Centropages spp.		10%	2%			2%		4%		30%		2%			10%	18%				18%	4%					
Echinodermata (larvae)				2%	2%	7%						71%		2%		7%	5%							2%		
Calycophorae (nectophore)				3%						5%			68%		5%	14%			5%							
Decapoda-brachyura (zoeae)		6%						3%		9%	3%	62%	3%	3%	6%			3%								
Ctenophora (larvae)	3%			3%		3%				32%			3%		45%									10%		
Decapoda-non brachyura (larvae)						4%	4%			4%			8%	69%					12%							
Tortanus spp.										21%		12%			8%	54%		4%								
Ascidiacea (larvae)			26%		9%												65%									
Oithona spp.		29%	6%		6%		6%							6%	6%	6%	35%									
Pseudocalanus spp.													14%				86%									
Calanus spp.										17%				67%		17%										
Copepoda (nauplii)	25%			25%																		50%				
Bryozoa (larvae)												100%														

Predictions of discarded taxa from training

Predicted Taxa	Calanoida (civ-vi) n=603	Cyclopoida (unid) n=3	Euphysa spp. (medusa) n=3	Ostracoda n=25	Zooplankton (unid) n=335
Acartia spp.	7.0% (n=42)	0.0%	0.0%	0.0%	0.3% (n=1)
Bivalvia (larvae)	0.0%	0.0%	0.0%	28.0% (n=7)	27.5% (n=92)
Bryozoa (larvae)	0.8% (n=5)	0.0%	0.0%	0.0%	4.8% (n=16)
Calanoida (ci-ciii)	0.5% (n=3)	0.0%	0.0%	0.0%	0.3% (n=1)
Calanus spp.	0.2% (n=1)	0.0%	0.0%	0.0%	0.0%
Calycophorae (nectophore)	0.3% (n=2)	0.0%	100.0% (n=3)	0.0%	0.0%
Centropages spp.	1.2% (n=7)	0.0%	0.0%	0.0%	0.0%
Cirripedia (larvae)	1.7% (n=10)	0.0%	0.0%	0.0%	2.4% (n=8)
Copepoda (nauplii)	0.0%	0.0%	0.0%	0.0%	1.8% (n=6)
Corycaeidae	22.1% (n=133)	0.0%	0.0%	4.0% (n=1)	2.4% (n=8)
Ctenophora (larvae)	0.3% (n=2)	0.0%	0.0%	8.0% (n=2)	3.0% (n=10)
Decapoda-brachyura (zoeae)	0.2% (n=1)	0.0%	0.0%	0.0%	0.0%
Decapoda-non brachyura (larvae)	0.3% (n=2)	0.0%	0.0%	0.0%	0.6% (n=2)
Echinodermata (larvae)	0.2% (n=1)	0.0%	0.0%	0.0%	0.0%
Evadne spp.	8.8% (n=53)	33.3% (n=1)	0.0%	28.0% (n=7)	6.9% (n=23)
Fritillaria spp.	0.2% (n=1)	0.0%	0.0%	0.0%	0.6% (n=2)
Gastropoda (larvae/Limacina)	0.0%	0.0%	0.0%	8.0% (n=2)	20.6% (n=69)
Hydrozoa (medusa)	0.0%	0.0%	0.0%	8.0% (n=2)	11.0% (n=37)
Oikopleura spp.	0.5% (n=3)	0.0%	0.0%	0.0%	0.0%
Oithona spp.	10.9% (n=66)	33.3% (n=1)	0.0%	0.0%	0.6% (n=2)
Paracalanus spp.	31.8% (n=192)	0.0%	0.0%	12.0% (n=3)	1.5% (n=5)
Podon/Pleopsis spp.	0.3% (n=2)	0.0%	0.0%	4.0% (n=1)	12.5% (n=42)
Polychaeta (larvae)	0.7% (n=4)	33.3% (n=1)	0.0%	0.0%	2.4% (n=8)
Pseudocalanus spp.	9.6% (n=58)	0.0%	0.0%	0.0%	0.9% (n=3)
Tortanus spp.	2.5% (n=15)	0.0%	0.0%	0.0%	0.0%

Actual discarded Taxa

Relative Abundance of Top Taxonomic Instances per Sample

Most abundant classes (In Val or Pred)
- Acartia spp.
- Calanoida (ci–ciii)
- Calanoida (civ–vi)
- Cirripedia (larvae)
- Corycaeidae
- Evadne spp.
- Fritillaria spp.
- Oikopleura spp.
- Paracalanus spp.
- Podon/Pleopsis spp.
- Zooplankton (unid)
- Others