

Use of SCN features: No
Max learning objects: 200 objects/class
Strategy N° 1

PA Selected Samples prediction using PA training set,
Learning with all classes present in the selected samples, no extra training categories,
No Calanoida (ci-vi), Cyclopoida, Zooplankton classes in learning set

Confusion Matrix – In percent of Actual Value

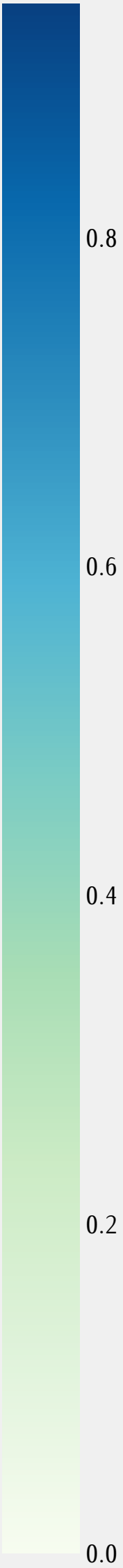
Classification Report Matrix
max 200 learning objects per class

Actual Values

Cirripedia (larvae)	57%	2%	<1%	8%	<1%	4%		5%	1%	3%	<1%	<1%	1%		2%	1%	4%	<1%		1%	4%		<1%	<1%	<1%	4%		<1%
Acartia spp.	<1%	43%	<1%		<1%	<1%	18%	4%	12%			<1%	<1%	2%		<1%	<1%			<1%	3%		9%	6%	<1%	<1%		
Oikopleura spp.	1%	1%	63%	1%	12%	1%	<1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	3%	4%	<1%	<1%	<1%	<1%	<1%	5%	<1%	<1%	<1%	1%		<1%
Podon/Pleopsis spp.	6%	<1%	<1%	17%	<1%	12%	<1%	16%	12%	1%	<1%	4%	10%	<1%		<1%	1%	<1%	<1%				<1%	<1%		16%		<1%
Fritillaria spp.	<1%	3%	26%		55%	2%	1%	<1%	1%			<1%	<1%		6%	<1%					3%	2%			<1%			
Evadne spp.	6%	1%	<1%	6%		65%	<1%	<1%	5%	<1%	2%		7%		1%	<1%	<1%	<1%		1%					<1%		2%	
Corycaeidae		7%	2%	<1%		<1%	63%	2%	7%			4%		1%		<1%	<1%			1%		1%	5%	<1%	<1%			
Calanoida (ci-ciü)	9%	5%		6%	3%	9%	7%	29%	5%			5%	<1%		8%							3%			9%		1%	
Paracalanus spp.		3%				<1%	2%		56%			<1%	<1%	<1%			2%	<1%		2%			27%	4%				
Gastropoda (larvae/Limacina)	2%	2%		10%	<1%	8%		2%	2%	44%	9%	2%	2%									2%			9%		6%	
Bivalvia (larvae)				1%				1%		8%	84%							1%								2%		2%
Polychaeta (larvae)	17%	6%		9%		3%	3%	3%	6%		2%	11%	6%			2%	5%	2%	5%		2%		9%	2%	6%		3%	
Hydrozoa (medusa)						5%			2%			2%	82%			4%	2%		2%							2%		
Centropages spp.		10%	2%				2%		2%					16%		2%	10%		14%		22%		14%	6%				
Echinodermata (larvae)				2%	2%	55%			2%			2%	14%			5%	2%	5%							5%		5%	
Calycophorae (nectophore)					3%								8%			70%	3%		8%		3%		3%	3%				
Decapoda-brachyura (zoeae)									6%			3%	6%		3%	47%		16%		16%			3%					
Ctenophora (larvae)						16%			3%		3%	3%	52%					10%							13%			
Decapoda-non brachyura (larvae)					4%	4%							4%				4%	8%	77%									
Ostracoda				4%		4%	4%			8%	32%		4%						44%									
Tortanus spp.		8%												12%		8%	8%		4%		58%							
Ascidiaacea (larvae)			13%																		87%							
Oithona spp.		29%			18%		6%						12%					6%		6%		24%						
Pseudocalanus spp.													14%			14%	14%	14%					57%					
Calanus spp.												17%				17%	17%	17%	17%	17%				33%				
Copepoda (nauplii)				25%				25%																	50%			
Euphysa spp. (medusa)														100%														
Bryozoa (larvae)	100%																											

Predicted Values

	precision	recall	f1-score
Cirripedia (larvae) (n=3231-train=200)	0.94	0.57	0.71
Acartia spp. (n=2290-train=200)	0.86	0.43	0.57
Oikopleura spp. (n=1773-train=200)	0.88	0.63	0.73
Podon/Pleopsis spp. (n=607-train=200)	0.24	0.17	0.20
Fritillaria spp. (n=475-train=200)	0.49	0.55	0.52
Evadne spp. (n=358-train=200)	0.44	0.65	0.53
Corycaeidae (n=335-train=200)	0.32	0.63	0.43
Calanoida (ci-ciü) (n=150-train=200)	0.11	0.29	0.16
Paracalanus spp. (n=141-train=200)	0.14	0.56	0.23
Gastropoda (larvae/Limacina) (n=126-train=200)	0.34	0.44	0.39
Bivalvia (larvae) (n=96-train=119)	0.62	0.84	0.72
Polychaeta (larvae) (n=65-train=200)	0.09	0.11	0.10
Hydrozoa (medusa) (n=55-train=200)	0.21	0.82	0.33
Centropages spp. (n=50-train=119)	0.11	0.16	0.13
Echinodermata (larvae) (n=42-train=200)	0.00	0.00	0.00
Calycophorae (nectophore) (n=37-train=200)	0.17	0.70	0.27
Decapoda-brachyura (zoeae) (n=32-train=200)	0.08	0.47	0.14
Ctenophora (larvae) (n=31-train=29)	0.14	0.10	0.11
Decapoda-non brachyura (larvae) (n=26-train=200)	0.33	0.77	0.46
Ostracoda (n=25-train=18)	0.17	0.44	0.24
Tortanus spp. (n=24-train=88)	0.06	0.58	0.10
Ascidiaacea (larvae) (n=23-train=54)	0.17	0.87	0.29
Oithona spp. (n=17-train=44)	0.02	0.24	0.03
Pseudocalanus spp. (n=7-train=65)	0.02	0.57	0.03
Calanus spp. (n=6-train=37)	0.08	0.33	0.13
Copepoda (nauplii) (n=4-train=200)	0.01	0.50	0.01
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
macro avg	0.25	0.44	0.27
weighted avg	0.74	0.52	0.58
	precision	recall	f1-score



Predictions of discarded taxa from training

Predicted Taxa

Acartia spp.	21.1% (n=127)	0.0%	0.9% (n=3)
Ascidacea (larvae)	0.2% (n=1)	0.0%	0.0%
Bivalvia (larvae)	0.0%	0.0%	38.8% (n=130)
Bryozoa (larvae)	0.0%	0.0%	2.7% (n=9)
Calanoida (ci-ciii)	6.3% (n=38)	33.3% (n=1)	1.5% (n=5)
Calanus spp.	0.7% (n=4)	0.0%	0.0%
Calycephorae (nectophore)	0.5% (n=3)	0.0%	0.0%
Centropages spp.	1.3% (n=8)	0.0%	0.0%
Cirripedia (larvae)	1.2% (n=7)	0.0%	1.8% (n=6)
Copepoda (nauplii)	0.3% (n=2)	0.0%	5.7% (n=19)
Corycaeidae	13.9% (n=84)	33.3% (n=1)	0.9% (n=3)
Decapoda-brachyura (zoeae)	1.3% (n=8)	0.0%	0.6% (n=2)
Decapoda-non brachyura (larvae)	0.2% (n=1)	0.0%	0.6% (n=2)
Echinodermata (larvae)	0.2% (n=1)	0.0%	0.0%
Evadne spp.	7.1% (n=43)	33.3% (n=1)	7.2% (n=24)
Fritillaria spp.	1.5% (n=9)	0.0%	0.3% (n=1)
Gastropoda (larvae/Limacina)	0.0%	0.0%	13.4% (n=45)
Hydrozoa (medusa)	1.3% (n=8)	0.0%	4.2% (n=14)
Oikopleura spp.	0.3% (n=2)	0.0%	0.3% (n=1)
Oithona spp.	5.1% (n=31)	0.0%	0.6% (n=2)
Ostracoda	0.0%	0.0%	0.3% (n=1)
Paracalanus spp.	28.0% (n=169)	0.0%	1.5% (n=5)
Podon/Pleopsis spp.	0.2% (n=1)	0.0%	15.2% (n=51)
Polychaeta (larvae)	0.5% (n=3)	0.0%	3.3% (n=11)
Pseudocalanus spp.	7.1% (n=43)	0.0%	0.3% (n=1)
Tortanus spp.	1.7% (n=10)	0.0%	0.0%

Actual discarded Taxa

35

30

25

20

15

10

5

0

Calanoida (ci-vi)
n=603

Cyclopoida (unid)
n=3

Zooplankton (unid)
n=335

Relative Abundance of Top Taxonomic Instances per Sample

