Use of SCN features: Yes

Actual Values

Max learning objects: 5000 objects/class Strategy N° 2

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

ma	Classification Report Matrix max 5000 learning objects per class										
	precision	recall	f1-score								
Cirripedia (larvae) (n=3231-train=5000)	0.92	0.74	0.82								
Acartia spp. (n=2290-train=4410)	0.88	0.79	0.83								
Oikopleura spp. (n=1773-train=4507)	0.82	0.82	0.82								
Podon/Pleopsis spp. (n=607-train=3605)	0.31	0.51	0.39								
Fritillaria spp. (n=475-train=844)	0.78	0.32	0.46								
Evadne spp. (n=358-train=981)	0.52	0.66	0.58								
Corycaeidae (n=335-train=1760)	0.57	0.70	0.63								
Calanoida (ci-ciii) (n=150-train=313)	0.28	0.10	0.15								
Paracalanus spp. (n=141-train=1525)	0.22	0.82	0.35								
Gastropoda (larvae/Limacina) (n=126-train=291)	0.83	0.23	0.36								
Bivalvia (larvae) (n=96-train=119)	0.76	0.77	0.77								
Polychaeta (larvae) (n=65-train=661)	0.24	0.18	0.21								
Hydrozoa (medusa) (n=55-train=301)	0.31	0.85	0.46								
Centropages spp. (n=50-train=119)	0.32	0.24	0.27								
Echinodermata (larvae) (n=42-train=2649)	0.00	0.00	0.00								
Calycophorae (nectophore) (n=37-train=966)	0.19	0.78	0.31								
Decapoda-brachyura (zoeae) (n=32-train=343)	0.22	0.81	0.35								
Ctenophora (larvae) (n=31-train=29)	0.60	0.10	0.17								
Decapoda-non brachyura (larvae) (n=26-train=219)	0.46	0.69	0.55								
Ostracoda (n=25-train=18)	0.07	0.04	0.05								
Tortanus spp. (n=24-train=88)	0.22	0.25	0.24								
Ascidiacea (larvae) (n=23-train=54)	0.89	0.35	0.50								
Oithona spp. (n=17-train=44)	0.00	0.00	0.00								
Pseudocalanus spp. (n=7-train=65)	0.30	0.43	0.35								
Calanus spp. (n=6-train=37)	0.25	0.50	0.33								
Copepoda (nauplii) (n=4-train=233)	0.00	0.00	0.00								
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								
Harpacticoida- epibenthic (n=0-train=47)	_	_	_								
Platyhelminthes/Nemertea (larvae) (n=0-train=145)	-	-	-								
macro avg (corr)	0.39	0.42	0.36								
weighted avg	0.77	0.70	0.72								
			[4								

precision recall f1-score

Strategy IV 2											Conf	usio	ı Ma	trix -	- In	perce	ent of /	Actu	ıal Va	alue								
	740	10,	z10c	4 F0.	-10	20,		-10	-10	-10	-10	-10	-10		40.	104	10,			-10	-10				-10.	-4	0.	z 1 0z
Cirripedia (larvae)			<1%					<1%		< 1%	< 1%	< 1%	< 1%				1%			< 1%	<1%	-10,	~10 _c	~10	<1%	<19	Ó	<1%
Acartia spp.											-10,	-10	-10	<1%			<1%	~ 10 ₄	-10		<1%		<1%		~ 10 ₄			~ 10 ₄
Oikopleura spp.			82%											< 1%	2%		<1% <	< 1%	< 1%		<1% <1%		<1%		<1% 2%			<1%
Podon/Pleopsis spp.											<1%				10,	<1%						-10,			2%			<1%
Fritillaria spp. Evadne spp.						66%	< 1%		<1% 5%		<1%		<1% 6%			<1%		<1%				<1%			<1%			<1%
Corycaeidae							70%	<1%			< 1/0	<1%		<1%			<1%		<1%				<1%		< 1/0			< 1/0
Calanoida (ci-ciii)												3%		< 1/0	10%	1/0	< 1/0		< 1/0				< 1/0		3%			<1%
Paracalanus spp.							<1%		82%			J/0	~1°	<1%		/10/	<1%						1%	2%	J/0			1/0
Gastropoda (larvae/Limacina)				44%			<1%			23%	0%	7%	<1%		<1%		\ 1'0						1/0	∠′0	2%			
Bivalvia (larvae)		J'0		11%		J′0	1%	۷,0	۷,0	1%	77%	Z'0	170		\ 1/0										1%			8%
Polychaeta (larvae)		9%		17%		5%	3%		9%	170	7-7-40	18%	5%		2%	2%	3%		5%						1.0			3/0
Hydrozoa (medusa)		3.0	2%	2%		4%	3.0		4%			10.0	85%		- 0	4%												
Centropages spp.		26%		_ 0		1 0	2%		. 0			2%		24%		1 0	6%		12%		14%		2%	8%				
Echinodermata (larvae)		_50	. 0	17%	2%	50%	_ 0		2%			_ 0	17%			7%			0		0		_ 0	3 0	2%			
Calycophorae (nectophore)				. , 0	_ 0				_ 0			3%	8%			78%	5%		5%						_ v			
Decapoda-brachyura (zoeae)									6%				3%			6%	81%		3%									
Ctenophora (larvae)				16%		13%						6%	48%			3%		10%										
Decapoda-non brachyura (larvae)		4%				4%							12%				12%		69%									
Ostracoda				4%		44%	4%				16%									4%								28%
Tortanus spp.	4%	8%												8%		25%	17%		12%		25%							
Ascidiacea (larvae)			65%																		35%							
Oithona spp.		59%	12%		12%									12%					6%									
Pseudocalanus spp.									29%							14%			14%				43%					
Calanus spp.													17%						17%				17%	50%				
Copepoda (nauplii)	25%			50%				25%																				
Euphysa spp. (medusa)																100%												
Bryozoa (larvae)	100%																											
	Cirril	Aca, Nedia (le	Oikop Tio Spp.	Podo Sp.	Prinipleops	Chadia Spp.	Coryle Spp.	Calan, Caeidae	Paral Poida (ci.	Cash, Ciii, Sh	Bivalla (la	Polylano Panaelin	Hydro haeta (la	Centro oto (med onde)	Chil.	Calylodermate	Decapode (ne (ne	Ctenopho, Ctopho,	Decapo hyura (lar	Ostral Ostral Non Nac)	Tortanus Spp. Stachyura (lana	Oitho	Pseud Na SPD.	Calany	Copepode Spp.	Euphysa Sp. (nauplii)	No meduso	Platyth Recticolida Rey Ex
													Na)			d Val				*0)	(land	<i></i>						Ex tra cla

Predictions of discarded taxa from training

Acartia spp.	45.9% (n=277)	33.3% (n=1)	1.5% (n=5)	
Bivalvia (larvae)	0.0%	0.0%	32.5% (n=109)	
Bryozoa (larvae)	0.0%	0.0%	0.3% (n=1)	
Calanoida (ci-ciii)	0.8% (n=5)	0.0%	0.6% (n=2)	40
Calanus spp.	0.7% (n=4)	0.0%	0.0%	
Calycophorae (nectophore)	0.7% (n=4)	0.0%	0.0%	
Centropages spp.	0.5% (n=3)	0.0%	0.0%	
Cirripedia (larvae)	3.3% (n=20)	0.0%	2.7% (n=9)	
Copepoda (nauplii)	0.0%	0.0%	0.6% (n=2)	30
Corycaeidae	10.1% (n=61)	33.3% (n=1)	2.4% (n=8)	
Decapoda-brachyura (zoeae)	1.3% (n=8)	0.0%	0.6% (n=2)	
Decapoda-non brachyura (larvae)	0.2% (n=1)	0.0%	0.3% (n=1)	
Echinodermata (larvae)	0.3% (n=2)	0.0%	0.0%	
Evadne spp.	7.3% (n=44)	33.3% (n=1)	6.0% (n=20)	20
Fritillaria spp.	0.5% (n=3)	0.0%	0.3% (n=1)	20
Gastropoda (larvae/Limacina)	0.0%	0.0%	3.9% (n=13)	
Harpacticoida- epibenthic	0.2% (n=1)	0.0%	0.0%	
Hydrozoa (medusa)	0.3% (n=2)	0.0%	1.8% (n=6)	
Oikopleura spp.	1.5% (n=9)	0.0%	0.6% (n=2)	
Paracalanus spp.	24.0% (n=145)	0.0%	2.1% (n=7)	10
Platyhelminthes/Nemertea (larvae)	0.0%	0.0%	4.8% (n=16)	
Podon/Pleopsis spp.	0.7% (n=4)	0.0%	36.7% (n=123)	
Polychaeta (larvae)	0.7% (n=4)	0.0%	2.4% (n=8)	
Pseudocalanus spp.	0.5% (n=3)	0.0%	0.0%	
Tortanus spp.	0.5% (n=3)	0.0%	0.0%	0
	Calanois	$C_{yclopo:}$	$\gtrsim_{00pl_{\partial D}}$	U
Extra training classes	Calanoida (ci	Cyclopoida (u.	Zooplankton (u	Inid)

Actual discarded Taxa

Relative Abundance of Top Taxonomic Instances per Sample



