Use of SCN features: Yes Max learning objects: 200 objects/class Strategy N° 3

Actual Values

PA Selected Samples prediction using PA training set, Learning with selected samples classes with no low regional training instances, no extra training categories, No Calanoida (civ-vi), Cyclopoida, Zooplankton classes in learning set

Classification	Report Matrix
max 200 learning	objects per class

precision recall f1-score

	Confusion Matrix – In percent of Actual Value														max 200 learning objects per clas				;										
Cirripedia (larvae) 55% 2% <1% 8% <1% 4% 4% 3% 3% <1% <1% 2% 3% 1% 6% 2% <1% <1% 5% <1%															precision	recall	f1-score												
Cirripedia (larvae)		2%	<1%	8%		4%		4%	3%	3%	<1%	<1%	2%		3%	1%	6%		2%		<1%			<1%	Cirripedia (larvae) (n=3231-train=200)	0.95	0.55	0.69	
Acartia spp.		43%	<1%			<1%			13%		_	<1%		2%		<1%	<1%		2%			5%	<1%		Acartia spp. (n=2290-train=200)	0.85	0.43	0.57	
Oikopleura spp.		1%			9%		<1%				<1%			2%	3%	5%	20	<1%	<1%	5%	<1%			<1%	Oikopleura spp. (n=1773-train=200)	0.88	0.63	0.73	
Podon/Pleopsis spp.			<1%		<1%				12%	1%	<1%		12%	<1%	70,		2%			404	<1%	<1%	15%	<1%	Podon/Pleopsis spp. (n=607-train=200)	0.23	0.17	0.19	
Fritillaria spp. Evadne spp.		3% 1%	27% <1%		53%	63%	1%	<1%		1%	2%		<1% 7%			<1% <1%				4%	1%		<1%	7%	Fritillaria spp. (n=475-train=200)	0.53	0.53	0.53	
Corycaeidae		8%	2%	1%		<1%		2%	8%	1/0	2/0	2%	7 ′0	1%	170	<1%	<1%	<1%	1%		<1%	5%	<1%	Z′0	Evadne spp.	0.42	0.63	0.51	
Calanoida (ci-ciii)		5%	2.0	5%	3%	8%	7%	30%	5%				<1%		9%	110	110	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	1.0		1%	3.0	9%	1%	(n=358-train=200) Corycaeidae				
Paracalanus spp.		2%				<1%			58%					2%					3%			31%			(n=335-train=200)	0.50	0.64	0.41	0.8
Gastropoda (larvae/Limacina)	2%	<1%		9%	2%	6%		3%	3%	49%	8%	<1%									2%		10%	3%	Calanoida (ci-ciii) (n=150-train=200)	0.12	0.30	0.17	
Bivalvia (larvae)				4%		1%		1%		7%	83%												1%	2%	Paracalanus spp. (n=141-train=200)	0.13	0.58	0.21	
Polychaeta (larvae)	14%	8%		9%		3%	2%	5%	8%	2%		12%	6%		2%	2%	5%	5%	2%			11%	5%	3%	Gastropoda (larvae/Limacina) (n=126-train=200)	0.35	0.49	0.41	
Hydrozoa (medusa)						4%			2%				84%	2%		4%	2%						4%		Bivalvia (larvae) (n=96-train=119)	0.67	0.83	0.74	0.6
Centropages spp.		12%	2%						4%					24%		2%	8%	18%	18%			12%			Polychaeta (larvae) (n=65-train=200)	0.09	0.12	0.11	
Echinodermata (larvae)				5%	2%	60%			2%			2%	19%			5%	2%						2%		Hydrozoa (medusa) (n=55-train=200)	0.19	0.84	0.32	
Calycophorae (nectophore)					3%								8%	3%		73%	5%	8%							Centropages spp. (n=50-train=119)	0.12	0.24	0.16	
Decapoda-brachyura (zoeae)							3%		3%				3%	6%		3%	72%	6%	3%						(n=50-train=119) Echinodermata (larvae)				0.4
Decapoda-non brachyura (larvae)						4%	4%						12%				4%	77%							(n=42-train=200)	0.00	0.00	0.00	0.1
Tortanus spp.		4%						4%						4%		17%	8%	12%	50%						Calycophorae (nectophore) (n=37-train=200)	0.13	0.73	0.25	
Ascidiacea (larvae)			17%																	83%					Decapoda-brachyura (zoeae) (n=32-train=200)	0.09	0.72	0.17	
Oithona spp.		35%	6%		18%									12%				6%			24%				Decapoda-non brachyura (larvae) (n=26-train=200)	0.38	0.77	0.51	
Pseudocalanus spp.														14%			14%	14%				57%			Tortanus spp. (n=24-train=88)	0.07	0.50	0.12	0.2
Copepoda (nauplii)				25%				25%															50%		Ascidiacea (larvae) (n=23-train=54)	0.15	0.83	0.25	
Bryozoa (larvae)		4.	Q:.	<i>∧</i>	<u>^.</u>	♦	G	C	₽	C.	⊘ .	Ą	4 .	G		C	0		<i>\</i>	40	Q:	Ø,	G	Ø.	O:4b		0.24	0.04	
	Tripel	Acarria	, 140pl	QUIA Odon	Pleon	oria sp	Coryce Spp.	Peidae Caland	ida (arata)	Anus Astrop	Doda Walk	. Olych	Sacta (POO (P	odges Chine	oderno disco	Dohor CCA	Dolla b.	Odd Dordani	ous Sp.	Ced (1	PSelledo SPP.	Open Open	oryozoa ((n=17-train=44) Pseudocalanus spp.				
the sp. Sp. Siii the street of the sp. S												0.0																	
Copepoda (nauplii) (n=4-train=200) Copepoda (nauplii) (n=4-train=200)														0.50	0.01														
											Р	redicte	d Valu	es							9				Bryozoa (larvae) (n=1-train=50)	0.00	0.00	0.00	
											·	· carete	vatu												macro avg	0.28	0.49	0.30	
																									weighted avg	0.74	0.51	0.58	

								,		100
	Acartia spp.	21.1% (n=127)	0.0%	0.0%	0.0%	0.0%	0.0%	0.6% (n=2)		100
	Ascidiacea (larvae)	0.2% (n=1)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
	Bivalvia (larvae)	0.0%	0.0%	3.2% (n=1)	0.0%	0.0%	36.0% (n=9)	40.3% (n=135)		
	Bryozoa (larvae)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.3% (n=11)		
	Calanoida (ci-ciii)	5.5% (n=33)	0.0%	0.0%	0.0%	0.0%	0.0%	0.9% (n=3)		80
	Calycophorae (nectophore)	0.5% (n=3)	0.0%	0.0%	0.0%	100.0% (n=3)	0.0%	0.0%		
	Centropages spp.	2.2% (n=13)	16.7% (n=1)	0.0%	0.0%	0.0%	0.0%	0.0%		
	Cirripedia (larvae)	1.0% (n=6)	0.0%	0.0%	0.0%	0.0%	0.0%	1.5% (n=5)		
	Copepoda (nauplii)	0.2% (n=1)	0.2% (n=1) $0.0%$ $6.5% (n=2)$ $0.0%$				0.0%	6.3% (n=21)		
(a	Corycaeidae	17.7% (n=107)	0.0%	0.0%	33.3% (n=1)	0.0%	0.0%	1.5% (n=5)		60
Taxa	Decapoda-brachyura (zoeae)	0.8% (n=5)	16.7% (n=1)	0.0%	0.0%	0.0%	0.0%	0.9% (n=3)		
	Decapoda-non brachyura (larvae)	0.2% (n=1)	33.3% (n=2)	0.0%	0.0%	0.0%	0.0%	0.3% (n=1)		
Predicted	Echinodermata (larvae)	0.2% (n=1)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
pə.	Evadne spp.	7.6% (n=46)	0.0%	19.4% (n=6)	33.3% (n=1)	0.0%	36.0% (n=9)	7.2% (n=24)		
Ъ	Fritillaria spp.	1.2% (n=7)	0.0%	0.0%	0.0%	0.0%	0.0%	0.9% (n=3)		40
	Gastropoda (larvae/Limacina)	0.0%	0.0%	0.0%	0.0%	0.0%	8.0% (n=2)	16.7% (n=56)		
	Hydrozoa (medusa)	1.8% (n=11)	16.7% (n=1)	64.5% (n=20)	0.0%	0.0%	0.0%	4.5% (n=15)		
	Oikopleura spp.	0.5% (n=3)	0.0%	0.0%	0.0%	0.0%	0.0%	0.3% (n=1)		
	Oithona spp.	4.0% (n=24)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
	Paracalanus spp.	26.7% (n=161)	0.0%	3.2% (n=1)	0.0%	0.0%	12.0% (n=3)	2.1% (n=7)		20
	Podon/Pleopsis spp.	0.2% (n=1)	0.0%	3.2% (n=1)	0.0%	0.0%	4.0% (n=1)	10.1% (n=34)		
	Polychaeta (larvae)	0.5% (n=3)	0.0%	0.0%	33.3% (n=1)	0.0%	4.0% (n=1)	2.7% (n=9)		
	Pseudocalanus spp.	6.6% (n=40)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
	Tortanus spp.	1.5% (n=9)	16.7% (n=1)	0.0%	0.0%	0.0%	0.0%	0.0%		0
		C _{0/-}	C _{0/-}	C_{top}	Cyclopo hora (larvae)	EuphyDida (unid)	$O_{St_{race}}$ S_{race} S_{r	Zooplani Oda ^{n∈335} ani		0
		$\eta \approx 603$	Calanu ida (ci _{V-Vi)}	$s s_{n_n} = 31$	$h_{ora} \stackrel{\eta > 3}{\sim} 3^{clop}$	Pida n=3 Phys	sa sn. 25	$p_{\mathbf{d_a}} \stackrel{looplan}{\underset{n \geq 335}{\sim}}$	kton	
		J	(ci _{v-vi)}	$\sim \mu$.	" (larvan)	(unid)	PP. (med.	J	" (uni	d)
			,		9	,	44	50)		,

Relative Abundance of Top Taxonomic Instances per Sample



