Use of SCN features: Yes

Max learning objects: Maximum objects/class Strategy N° 1

Actual Values

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

Confusion Matrix In persont of Actual Value

										C	onfusi	on M	latrix	– In <sub>I</sub>	percei	nt of A	Actua	l Valı	ie								
Cirripedia (larvae)	76%	1%	<1%	15%	<1%	2%	<1%	<1%	<1%	<1%	<1%	<1%	<1%		<1%	1%	1%			<1%	<1%					<1%	<1%
Acartia spp.	1%	80%	<1%	<1%	<1%	<1%	6%	<1%	9%				<1%	<1%		<1%	<1%				<1%		<1%	<1%	<1%		
Oikopleura spp.	2%	2%	82%	3%	2%	1%	<1%	<1%	1%		<1%	<1%	<1%	<1%	2%	3%	<1%	<1%			<1%	<1%		<1%		<1%	<1%
Podon/Pleopsis spp.	10%	2%	<1%	53%	<1%	11%	1%	1%	11%	<1%	<1%	2%	3%			<1%	2%									1%	
Fritillaria spp.	<1%	7%	52%	<1%	32%	2%	<1%		<1%			<1%	<1%		4%	<1%							<1%				
Evadne spp.	8%	1%	<1%	13%		65%	<1%		5%		<1%	<1%	6%		<1%	<1%										<1%	
Corycaeidae	<1%	16%	2%	1%		<1%	70%	<1%	4%			<1%		<1%		1%	<1%		<1%		<1%			<1%	<1%		
Calanoida (ci-ciii)	18%	17%	<1%	13%		5%	9%	10%	9%			5%			9%											4%	<1%
Paracalanus spp.	<1%	7%	<1%	1%		1%	<1%		82%				<1%	<1%		<1%	<1%							1%	1%		
Gastropoda (larvae/Limacina)	7%	5%		53%		3%			4%	17%	6%	<1%	2%		<1%											2%	
Bivalvia (larvae)				15%		1%	1%			2%	79%															2%	
Polychaeta (larvae)	25%	8%		15%		5%	5%		6%			22%	5%		2%	2%	3%		5%								
Hydrozoa (medusa)			2%	2%		5%			2%				82%			5%	2%										
Centropages spp.		26%	4%				2%		2%			2%		20%			8%		14%		14%			2%	6%		
Echinodermata (larvae)	2%			17%	2%	50%			2%				14%			10%										2%	
Calycophorae (nectophore)													8%			81%	5%		3%						3%		
Decapoda-brachyura (zoeae)									6%				3%	3%		6%	78%		3%								
Ctenophora (larvae)	3%			16%		16%							55%			3%		6%									
Decapoda-non brachyura (larvae)		4%				4%							12%				8%		73%								
Ostracoda				28%		40%	4%				24%									4%							
Tortanus spp.	4%	4%												8%		25%	17%		12%		29%						
Ascidiacea (larvae)			61%																			39%					
Oithona spp.		59%	6%		12%		6%							12%					6%								
Pseudocalanus spp.									29%							14%			14%					43%			
Calanus spp.																33%			50%						17%		
Copepoda (nauplii)	25%			25%					25%																	25%	
Euphysa spp. (medusa)																100%											
Bryozoa (larvae)		1				^									^				^		λ	4		^			
	Cirripo	Acari.	Oikoli Solo	Podol.	Py Titile	aria Spp.	Coryce Spp.	dan dan	Parace Oids (ci.cl.	Castro Nanus Spl	Don't dhe	Toly C	Hydro, Nacta (lan	CONTRO	Chine Sp.	ode, dly co		Ctenop Ctenop	No. Octal	Ooks Strate	Od	ys scidle	Oithold Pane	Sello	Calanus Sp	Copepo	Euphysa Spp. (neu
		dan	PD.	1/2/10	(ODS/S	~~ ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	20.	Jak	a (ci.ci		? da (lan	Varyae)	) dan	medi		Thata	10tae (1)	De Brach	Ta (lan	Ton		<i>S</i> 00.	alland		Ylanus S	<i>70.</i>	(nauplin (ma
						<b>%</b>					Birolio (lar)	Climac	'A	9	9)		"Nae/	Ctenop Dectophore	Tra Roe	<i>9</i>	Portant Odd Arachyura			ツ		D,	V V
													10)					J	(	(e)	/	anael					

Predicted Values

## Classification Report Matrix max available learning objects per class

THO,		9	Jeers per e
	precision	recall	f1-score
Cirripedia (larvae) (n=3231-train=6358)	0.92	0.76	0.83
Acartia spp. (n=2290-train=4410)	0.87	0.80	0.83
Oikopleura spp. (n=1773-train=4507)	0.82	0.82	0.82
Podon/Pleopsis spp. (n=607-train=3605)	0.31	0.53	0.39
Fritillaria spp. (n=475-train=844)	0.78	0.32	0.45
Evadne spp. (n=358-train=981)	0.52	0.65	0.57
Corycaeidae (n=335-train=1760)	0.56	0.70	0.62
Calanoida (ci-ciii) (n=150-train=313)	0.34	0.10	0.15
Paracalanus spp. (n=141-train=1525)	0.24	0.82	0.37
Gastropoda (larvae/Limacina) (n=126-train=291)	0.75	0.17	0.27
Bivalvia (larvae) (n=96-train=119)	0.76	0.79	0.78
Polychaeta (larvae) (n=65-train=661)	0.26	0.22	0.24
<b>Hydrozoa (medusa)</b> (n=55-train=301)	0.31	0.82	0.45
Centropages spp. (n=50-train=119)	0.28	0.20	0.23
Echinodermata (larvae) (n=42-train=2649)	0.00	0.00	0.00
Calycophorae (nectophore) (n=37-train=966)	0.18	0.81	0.29
Decapoda-brachyura (zoeae) (n=32-train=343)	0.25	0.78	0.37
<b>Ctenophora (larvae)</b> (n=31-train=29)	0.67	0.06	0.12
capoda-non brachyura (larvae) (n=26-train=219)	0.47	0.73	0.58
Ostracoda (n=25-train=18)	0.08	0.04	0.05
Tortanus spp. (n=24-train=88)	0.29	0.29	0.29
Ascidiacea (larvae) (n=23-train=54)	0.82	0.39	0.53
Oithona spp. (n=17-train=44)	0.00	0.00	0.00
Pseudocalanus spp. (n=7-train=65)	0.23	0.43	0.30
Calanus spp. (n=6-train=37)	0.11	0.17	0.13
Copepoda (nauplii) (n=4-train=233)	0.03	0.25	0.06
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	0.39	0.42	0.35
weighted avg	0.77	0.70	0.72
	precision	recall	f1-score

## Predictions of discarded taxa from training

	Acartia spp.	46.3% (n=279)	33.3% (n=1)	1.8% (n=6)	
	Bivalvia (larvae)	0.0%	0.0%	33.1% (n=111)	
	Bryozoa (larvae)	0.0%	0.0%	0.3% (n=1)	
	Calanoida (ci-ciii)	0.7% (n=4)	0.0%	0.3% (n=1)	40
	Calanus spp.	0.7% (n=4)	0.0%	0.0%	
	Calycophorae (nectophore)	0.8% (n=5)	0.0%	0.0%	
	Centropages spp.	0.5% (n=3)	0.0%	0.0%	
	Cirripedia (larvae)	3.5% (n=21)	0.0%	3.0% (n=10)	20
	Copepoda (nauplii)	0.0%	0.0%	1.2% (n=4)	30
аха	Corycaeidae	10.4% (n=63)	33.3% (n=1)	2.4% (n=8)	
Predicted Taxa	Decapoda-brachyura (zoeae)	1.2% (n=7)	0.0%	0.3% (n=1)	
tec	Decapoda-non brachyura (larvae)	0.0%	0.0%	0.3% (n=1)	
dic	Echinodermata (larvae)	0.3% (n=2)	0.0%	0.3% (n=1)	20
Pre	Evadne spp.	7.6% (n=46)	33.3% (n=1)	6.0% (n=20)	20
	Fritillaria spp.	0.5% (n=3)	0.0%	0.3% (n=1)	
	Gastropoda (larvae/Limacina)	0.0%	0.0%	2.1% (n=7)	
	Hydrozoa (medusa)	0.3% (n=2)	0.0%	1.5% (n=5)	
	Oikopleura spp.	1.5% (n=9)	0.0%	0.3% (n=1)	10
	Paracalanus spp.	23.1% (n=139)	0.0%	2.1% (n=7)	10
	Podon/Pleopsis spp.	1.2% (n=7)	0.0%	42.1% (n=141)	
	Polychaeta (larvae)	0.5% (n=3)	0.0%	2.7% (n=9)	
	Pseudocalanus spp.	0.5% (n=3)	0.0%	0.0%	
	Tortanus spp.	0.5% (n=3)	0.0%	0.0%	0
		$^{C_{m{al_a}_{m{noid_a}}}}_{n pprox 603}$ (ci	Cyclopoida (u N~vi)	Zooplankton (u)	O Piaj

Actual discarded Taxa

Relative Abundance of Top Taxonomic Instances per Sample



