Use of SCN features: Yes

Max learning objects: 20000 objects/class Strategy N° 1

NL 2021 Selected Samples prediction using NL 2021 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 percent of Actual Value

										Confi	ust o n	Matr	ix – II	n per	cent	OI AC	ludi	vatue								
Acartia spp.	73%	<1%	7%	9%	3%			7%				<1%				<1%			<1%							
Evadne spp.		95%	<1%	<1%	<1%	<1%	2%	<1%						<1%	<1%	<1%			<1%							
Temora spp.	14%	2%	56%	8%	3%			16%		<1%		<1%				<1%			<1%							
Pseudocalanus spp.	24%		14%	54%	<1%			7%				<1%					<1%			<1%						
Oithona spp.	12%	1%	1%		79%	<1%		4%			<1%					2%										
Bryozoa (larvae)		56%				36%	<1%	3%			<1%			1%	<1%	1%			<1%							
Podon/Pleopsis spp.	1%	20%	20%	3%			14%	17%								<1%	<1%		25%							
Calanoida (ci-ciii)	12%	15%	9%	6%	3%		5%	48%									<1%			<1%						
Oikopleura spp.			3%	3%	3%				59%		<1%					29%		<1%		2%						
Centropages spp.	62%		8%	3%						23%	1%									1%						1%
Echinodermata (larvae)	4%				20%		2%	6%	2%		20%					46%										
Harpacticoida- epibenthic	32%	2%	6%	11%	9%			11%				30%														
Hydrozoa (medusa)		30%					2%	2%			4%					26%			21%	4%		11%				
Gastropoda (larvae/Limacina)		9%					15%							57%	11%				9%							
Bivalvia (larvae)						5%	5%							16%	75%											
Fritillaria spp.					15%				3%		3%					79%										
Microcalanus spp.		13%	6%	13%				52%									10%		6%							
Chaetognatha									39%							11%		43%	4%	4%						
Polychaeta (larvae)	5%	15%		5%	10%			15%											50%							
Calanus spp.	7%			14%																79%						
Eurytemora spp.	40%		30%	30%																						
Aglantha spp. (medusa)																			11%	11%		78%				
Oncaeidae spp.	17%			17%	17%			17%				33%														
Sarsia spp. (medusa)																25%			50%			25%				
Ostracoda		50%				50%																				
Tortanus spp.	50%																			50%						
capoda-non brachyura (larvae)																				100%						
	Acart	Spp.	Temol Spp.	Selle Spp.	To Oitho	Bryoz	Podol	Calan	Oikop Dia	Centro	Chin	Harpa	Hydro	Castro	Birdh	Pritille (larvae)	Micro	Chaette Calanus S.	Polych	Calant	Suryte,	Aglani	Oncael	Sarsia	OSTraco	Portanus Spp.
		<i>Sp.</i>	500	Sp	Oitho Oitho	Bryon	Podol.	Calange Calang	da (ci.	Centro, Spp.	OGES SDI	'ermata	Hydrox Chicoida Change	(medi	Oda (lan	Pritille (lange)	100	Chaete Calanus St.	Shatha	Calani Backa (lan	Suryten	Ord Spp	8 Dp. (1	Sarsia Sp. Sedusa)	Ostracodo	Portanus SPD.
						20.			%		,	. 7	ander ?	oibenthic	<i>''</i>	delinar	<i>٠</i> ٠	• 7	,		<i>(e)</i>	·	17	edusa)	Yus))
														• ()		Ć.	nal									

ma	Classification Report Matrix x 20000 learning objects per cl								
	precision	recall	f1-score						
Acartia spp. (n=2490-train=5448)	0.76	0.73	0.74						
Evadne spp. (n=1931-train=2845)	0.87	0.95	0.91						
Temora spp. (n=1416-train=5148)	0.66	0.56	0.61						
Pseudocalanus spp. (n=1044-train=4552)	0.59	0.54	0.56						
Oithona spp. (n=345-train=1409)	0.66	0.79	0.72						
Bryozoa (larvae) (n=248-train=119)	0.95	0.36	0.52						
Podon/Pleopsis spp. (n=230-train=201)	0.35	0.14	0.20						
Calanoida (ci-ciii) (n=130-train=3713)	0.09	0.48	0.16						
Oikopleura spp. (n=115-train=761)	0.84	0.59	0.69						
Centropages spp. (n=88-train=40)	0.95	0.23	0.37						
Echinodermata (larvae) (n=50-train=276)	0.56	0.20	0.29						
Harpacticoida- epibenthic (n=47-train=136)	0.74	0.30	0.42						
Hydrozoa (medusa) (n=47-train=21)	0.00	0.00	0.00						
Gastropoda (larvae/Limacina) (n=47-train=110)	0.52	0.57	0.55						
Bivalvia (larvae) (n=44-train=71)	0.80	0.75	0.78						
Fritillaria spp. (n=34-train=3447)	0.23	0.79	0.35						
Microcalanus spp. (n=31-train=80)	0.43	0.10	0.16						
Chaetognatha (n=28-train=67)	0.92	0.43	0.59						
Polychaeta (larvae) (n=20-train=452)	0.10	0.50	0.17						
Calanus spp. (n=14-train=213)	0.48	0.79	0.59						
Eurytemora spp. (n=10-train=88)	0.00	0.00	0.00						
Aglantha spp. (medusa) (n=9-train=21)	0.54	0.78	0.64						
Oncaeidae spp. (n=6-train=16)	0.00	0.00	0.00						
Sarsia spp. (medusa) (n=4-train=4)	0.00	0.00	0.00						
Ostracoda (n=2-train=6)	0.00	0.00	0.00						
Tortanus spp. (n=2-train=4)	0.00	0.00	0.00						
Decapoda-non brachyura (larvae) (n=1-train=7)	0.00	0.00	0.00						
macro avg	0.45	0.39	0.37						
weighted avg	0.72	0.68	0.68						
	precision	recall	f1-score						

0.0

Predicted Values

Predictions of discarded taxa from training 100 0.0% 0.0% 100.0% (n=1) 0.6% (n=2) 24.1% (n=330) Acartia spp. 0.0% 0.0% 0.0% 0.0% 0.3% (n=1) Aglantha spp. (medusa) Bivalvia (larvae) 0.0% 0.0% 0.0% 0.0% 8.8% (n=28) 80 Bryozoa (larvae) 0.0% 0.0% 0.0% 0.0% 1.9% (n=6) 31.1% (n=426) 0.0% 0.0% Calanoida (ci-ciii) 50.0% (n=1) 7.5% (n=24) 0.0% 0.0% 0.0% 0.3% (n=1) Calanus spp. 0.1% (n=1) 0.0% Echinodermata (larvae) 0.1% (n=1) 0.0% 0.0% 1.6% (n=5) 60 **Predicted Taxa** Evadne spp. 5.5% (n=76) 50.0% (n=1) 0.0% 0.0% 39.6% (n=126) 0.0% 0.0% Fritillaria spp. 1.6% (n=22) 0.0% 3.8% (n=12) Gastropoda (larvae/Limacina) 0.0% 0.0% 100.0% (n=1) 0.0% 9.1% (n=29) 40 Microcalanus spp. 0.1% (n=1) 0.0% 0.0% 0.0% 0.0% Oithona spp. 11.5% (n=158) 0.0% 0.0% 0.0% 2.5% (n=8) 0.0% 0.0% Ostracoda 0.0% 0.0% 0.3% (n=1) Podon/Pleopsis spp. 0.6% (n=8) 0.0% 0.0% 0.0% 10.7% (n=34) 20 Polychaeta (larvae) 0.4% (n=5) 0.0% 0.0% 0.0% 7.9% (n=25) 0.0% Pseudocalanus spp. 13.1% (n=179) 0.0% 0.0% 3.5% (n=11) 0.0% 0.0% 0.0% Temora spp. 11.9% (n=163) 1.6% (n=5) 0 Foraminifera $M_{onstrillidae}$ Zooplankton (unid) $C_{yclopoida}$ (unid)Calanoida (civ-vi)

Actual discarded Taxa



