Use of SCN features: No

Max learning objects: 200 objects/class Strategy N° 3

Actual Values

NL 2020 Selected Samples prediction using NL 2020 training set, Learning with selected samples classes with no low regional training instances, no extra training categories, No Anthoathecata, Calanoida, Copepoda, Zooplankton classes in learning set

Confusion Matrix - In percent of Actual Value

Classification Report Matrix max 200 learning objects per class

arming of									. Value	ot Actual	percent (trıx – In	ision Ma	Confi							
	precisio	Tomora con	40	40	4.0	40			450		4.0	60	4.0	20	20	40	4.70	20	60	4.00	-
0.46	0.71	Temora spp. (n=18103-train=200)	4%	<1%	<1%	<1%			15%		<1%	6%	<1%	2%	2%	<1%	17%	3%	6%	46%	Temora spp.
0.36	0.76	Acartia spp. (n=13302-train=200)	<1%	<1%	<1%	1%			20%	<1%		5%		2%	<1%	<1%	13%	1%	36%	20%	Acartia spp.
0.84	0.86	Evadne spp. (n=5228-train=200)	2%		<1%				<1%		<1%	2%	<1%		9%		<1%	84%	<1%	1%	Evadne spp.
0.46	0.23	Pseudocalanus spp. (n=3053-train=200)	1%		<1%	<1%		<1%	11%			2%		5%	<1%		46%	<1%	12%	22%	Pseudocalanus spp.
0.42	0.72	Centropages spp.		<1%					<1%					29%		43%	1%		15%	10%	Centropages spp.
0.43	0.73	(n=330-train=40)	38%					<1%	2%			<1%			41%		2%	6%		10%	Podon/Pleopsis spp.
0.41	0.10	Podon/Pleopsis spp. (n=253-train=200)	4%		1%				46%			23%		<1%	1%		8%	5%	7%	4%	Eurytemora spp.
0.01	0.00	Eurytemora spp. (n=178-train=88)	10%								19%		34%		35%			3%			Gastropoda (larvae/Limacina)
0.34	0.45	Gastropoda (larvae/Limacina) (n=112-train=110)			1%	2%			2%			91%						2%	2%		Oithona spp.
0.91	0.04	Oithona spp. (n=98-train=200)									90%		10%								Bivalvia (larvae)
0.90	0.66	Bivalvia (larvae) (n=92-train=71)				9%	21%	3%		63%				1%		1%				1%	Oikopleura spp.
0.63	0.88	Oikopleura spp. (n=70-train=200)	2%						72%			6%		4%	2%		12%			2%	Harpacticoida- epibenthic
								88%						8%		4%					Calanus spp.
0.72	0.01	Harpacticoida- epibenthic (n=50-train=136)	7%				87%			7%											Chaetognatha
0.88	0.79	Calanus spp. (n=25-train=200)			14%	57%				14%		14%									Fritillaria spp.
0.87	0.46	Chaetognatha (n=15-train=67)										60%			20%			20%			Echinodermata (larvae)
0.57	0.02	Fritillaria spp. (n=7-train=200)		100%																	Obelia spp. (medusa)
0.00	0.00	Echinodermata (larvae) (n=5-train=200)															100%				Polychaeta (larvae)
1.00	0.14	Obelia spp. (medusa) (n=1-train=43) Polychaeta (larvae)	Polychae (medusa)	Obelia Spermata (lanae)	Chinod	Prinilland	Charles	Calanu, Coida Coibenn	Harpaci	Oikoplell (lange)	Sp. Sp.	Oithona Oda (larvae/line	Castrope Tora Spp.	Chryten, Cheopsis Spp.	Podon/	Centropo Manus Spp.	Spp. Selidoc	Exadno ?	Acartia St.	Tenora ,	
0.00	0.00	Polychaeta (larvae) (n=1-train=200)	"edusa)	(lande)			Ric	Cpibent.	D,	*0)	Pcina)	ande/line	<i>~p</i> ,	, 200	70,	<i>Spp.</i>					
0.54	0.38	macro avg									ed Values										
0.48	0.70	weighted avg																			

1	max 200 learning objects per class										
	precision	recall	f1-score								
Temora spp. (n=18103-train=200)	0.71	0.46	0.55								
Acartia spp. (n=13302-train=200)	0.76	0.36	0.49								
Evadne spp. (n=5228-train=200)	0.86	0.84	0.85								
Pseudocalanus spp. (n=3053-train=200)	0.23	0.46	0.31								
Centropages spp. (n=330-train=40)	0.73	0.43	0.54								
Podon/Pleopsis spp. (n=253-train=200)	0.10	0.41	0.16								
Eurytemora spp. (n=178-train=88)	0.00	0.01	0.00								
Gastropoda (larvae/Limacina) (n=112-train=110)	0.45	0.34	0.39								
Oithona spp. (n=98-train=200)	0.04	0.91	0.08								
Bivalvia (larvae) (n=92-train=71)	0.66	0.90	0.76								
Oikopleura spp. (n=70-train=200)	0.88	0.63	0.73								
Harpacticoida- epibenthic (n=50-train=136)	0.01	0.72	0.01								
Calanus spp. (n=25-train=200)	0.79	0.88	0.83								
Chaetognatha (n=15-train=67)	0.46	0.87	0.60								
Fritillaria spp. (n=7-train=200)	0.02	0.57	0.05								
Echinodermata (larvae) (n=5-train=200)	0.00	0.00	0.00								
Obelia spp. (medusa) (n=1-train=43)	0.14	1.00	0.25								
Polychaeta (larvae) (n=1-train=200)	0.00	0.00	0.00								
macro avg	0.38	0.54	0.37								
weighted avg	0.70	0.48	0.55								
	procision	rocall	fl coore								

precision

recall f1-score

Predictions of discarded taxa from training Acartia spp. 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 6.9% (n=314) 0.0% 0.0% 0.0% 2.1% (n=24) 0.0% Bivalvia (larvae) 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 4.7% (n=3) 0.0% 0.0% 9.8% (n=110) Calanus spp. 20.0% (n=2) 100.0% (n=1) 33.3% (n=2) 0.0% 57.1% (n=8) 0.0% 0.0% 0.0% 0.0% (n=2) 100.0% (n=2) 1.6% (n=1) 50.0% (n=1) 80 Centropages spp. 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.1% (n=3) 0.0% 0.0% 0.0% 0.0% 0.1% (n=1) Echinodermata (larvae) 0.0% 0.0% 0.0% 0.0% 50.0% (n=1 1.4% (n=66) 0.0% 0.0% 0.0% 0.0% 3.3% (n=37) 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.4% (n=4) 0.0% 1.5% (n=68) 0.0% 3.1% (n=2) Eurytemora spp. 0.0% Evadne spp. 0.0% 0.0% 0.0% 0.0% 0.0% 13.7% (n=624) 0.0% 14.1% (n=9) 0.0% 0.0% 29.7% (n=333) 60 Fritillaria spp. 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.8% (n=9) 0.7% (n=32) 1.6% (n=1) Gastropoda (larvae/Limacina) 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.1% (n=3) 0.0% 0.0% 0.0% 0.0% 6.5% (n=73) 0.0% 0.0% 21.9% (n=7) 0.0% 0.0% 16.4% (n=747) 0.0% 0.0% 2.6% (n=29) 0.0% 0.0% 0.0% Harpacticoida- epibenthic 40 0.0% 0.0% Obelia spp. (medusa) 80.0% (n=8) 50.0% (n=3) 0.0% 0.0% 0.0% 0.0% 0.0% 42.2% (n=27) 0.0% 0.3% (n=3) 100.0% (n=1) 0.0% 0.0% 16.7% (n=1) 0.0% 0.0% 0.0% 0.0% (n=2) 0.0% 1.6% (n=1) 0.0% 0.4% (n=5) Oikopleura spp. Oithona spp. 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 17.5% (n=799) 0.0% 0.0% 0.0% 0.0% 2.5% (n=28) Podon/Pleopsis spp. 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 30.2% (n=339) 0.0% 0.0% 6.7% (n=304) 0.0% 6.2% (n=4) 20 7.1% (n=1) Polychaeta (larvae) 0.0% 0.0% 0.0% 3.1% (n=1) 0.0% 7.4% (n=337) 0.0% 25.0% (n=16) 0.0% 0.0% 9.1% (n=102) Pseudocalanus spp. 0.0% 0.0% 65.6% (n=21) 28.6% (n=4) 0.5% (n=6) 0.0% 50.0% (n=1) 13.5% (n=615) 0.0% 0.0% 50.0% (n=1) 0.0% 1.8% (n=20) Temora spp. 0.0% 0.0% 0.0% 9.4% (n=3) 7.1% (n=1) 0.0% 14.2% (n=646) 0.0% 0.0% 0.0% 0.0% Decapoda-non brachyura (larvae) Anthoathecata (medusa) Zooplankton (unid) Cnidaria (larvae) Copepoda "== 4562 (unid) Metridia spp. Tomopteris spp. Chiridius spp. $n \ge 2$

Taxa

Predicted

Actual discarded Taxa

Relative Abundance of Top Taxonomic Instances per Sample Val Pred Val Pred Val Pred Val Pred Val Pred Val Pred Val Pred



