Use of SCN features: Yes

Max learning objects: 200 objects/class Strategy N° 4

Actual Values

NL 2021 Selected Samples prediction using NL 2021 training set, Learning with selected samples classes with no low regional training instances, with extra training categories, No Calanoida (civ-vi), Cyclopoida, Zooplankton classes in learning set

Confusion Matrix – In percent of Actual Value

Classification	Report Matrix
max 200 learning	objects per class

precision recall f1-score

									C	ontusio	on Ma	atrıx –	In perce	nt of A	Actua	l Valu	ie										max 200 tec	arming obje	cis per ciass
																											precision	recall	f1-score
Acartia spp.	47%	<1%	7%	15%	4%	<1%		3%	<1%	<1%	<1%	12%		<	<1%	2%				1%	<1%	<1%		2%	3%	Acartia spp (n=2490-train=200	0.74	0.47	0.58
Evadne spp.		78%		<1%	<1%	5%	6%	<1%			<1%		2% <	<1%		<1%		<1%			3%	3%	<1%		<1%	Evadne spp (n=1931-train=200	0.96	0.78	0.86
Temora spp.	10%	<1%	37%	10%	7%	<1%	<1%	10%		<1%	<1%	4%				3%		<1%		3%	4%	3%		<1%	6%	Temora spp (n=1416-train=200	0.62	0.37	0.46
Pseudocalanus spp.	20%		12%	45%	<1%			5%		<1%	<1%	4%		<	<1%	5%		<1%	<1%	6%		<1%		<1%	2%	Pseudocalanus spp (n=1044-train=200	0.47	0.45	0.46
Oithona spp.	8%		<1%	<1%	81%	<1%		<1%		<1%	1%	<1%			3%					<1%	<1%	<1%		<1%	3%	Oithona spp (n=345-train=200	0.52	0.81	0.63
Bryozoa (larvae)		4%				83%	2%				2%		2% <	<1% <	<1%	<1%		<1%			<1%	5%				Bryozoa (larvae (n=248-train=119	0.62	0.83	0.71
Podon/Pleopsis spp.		6%	4%	<1%		2%	25%		<1%	<1%		<1%				13%		14%		<1%	16%	17%			<1%	Podon/Pleopsis spp (n=230-train=200	0.28	0.25	0.26
Calanoida (ci-ciii)	10%	5%	3%	4%	5%	4%	5%	2%			2%	3%				17%		<1%	<1%	5%	6%	25%			4%	Calanoida (ci-cii (n=130-train=200	0.01	0.02	0.01
Oikopleura spp.					3%				66%		<1%			,	10%		7%		2%					2%		Oikopleura spp (n=115-train=200	0.89	0.66	0.76
Centropages spp.			1%	2%						69%									1%	5%	1%			2%		Centropages spp (n=88-train=40	0.86	0.69	0.77
			170	270	24%	20,	20/		70,	0.5/0	20%				20%			40,	170	<i>J</i> 70	170			270		Echinodermata (larvae (n=50-train=200	0.29	0.28	0.29
Echinodermata (larvae)			40	40	24%	2%	2%	40	2%		28%	700			30%			4%				40			20	Harpacticoida- epibenthi (n=47-train=136	0.08	0.72	0.14
Harpacticoida- epibenthic			4%	4%	6%	2%		4%				72%										4%			2%	Gastropoda (larvae/Limacina (n=47-train=110	0.41	0.62	0.49
stropoda (larvae/Limacina)		6%					15%							11%				6%								Bivalvia (larvae (n=44-train=7°	0.66	0.80	0.72
Bivalvia (larvae)						5%	2%						14%	30%												Fritillaria spp (n=34-train=200	0.50	0.74	0.43
Fritillaria spp.					15%				3%		9%				74%											Microcalanus spp (n=31-train=80	0.07	0.52	0.12
Microcalanus spp.		6%		3%	3%		3%	6%				6%				52%		3%			3%	13%				Chaetognath (n=28-train=67	0.72	0.75	0.74
Chaetognatha					4%				14%						4%		75%		4%							Polychaeta (larvae (n=20-train=200	0.00	0.20	0.11
Polychaeta (larvae)					10%		15%						5%	5%		10%		20%			15%	10%	5%		5%	Calanus spp (n=14-train=200	0.57	0.86	0.69
Calanus spp.										7%									86%	7%						Eurytemora spj (n=10-train=88		0.20	0.03
Eurytemora spp.	20%		10%	20%								10%								20%				20%		Cirripedia (larvae (n=0-train=200)) –	-	-
	Acarth	Spp.	Temore Spp.	Spp.	Oithon	Bryozo	Podon, Podon, Od (lange)	Calano	Oikopi Oida (ci.ciii)	leura Spp.	Chin	Harpalodermata (la	Castropode Chiber	Bivalvia	Fritillary	Microcal	Chaetog	Polycha	Calanus Calanus	Curyte	Cirriped Mora Spp.	Tie Copepo	Obelia .	Euphall.	Sis	Copepoda (naupli (n=0-train=200))	-	-
		<i>1</i> 0.	<i>12</i> 0.	<i>1</i> 0.	Oithold Sp.	, ₁₀ 0	(larvae)	Calano Calano		1 2/2 PV	Ses Sop.	mata (la	Castropode Chicoida Chibert	(lange/	ender	500	Thus Spp.	Polycha Inatha	d (lande)	<i>PD</i> .	To Spp.	(lande)	Obelia (nauplii)	D. (medy	Suppaus (lances)	Copepoda (naupli (n=0-train=200) Obelia spp. (medusa (n=0-train=43) Euphausiacea (larvae	3) –	_	-
													*0) '11	Thic "	nacinal											(n=0-train=75	5) –	_	-
												Pred	icted Valı	ıes											Ext trai	ning (n=0-train=122	(1) (2)	-	-
																									- 243	macro avg (corr		0.55	0.46
																										weighted av		0.54	0.60
																											procision	rocall	f1 ccoro

Predictions of discarded taxa from training Acartia spp. 0.0% 14.0% (n=192) 0.0% 0.0% 0.0% 0.0% 100.0% (n=1) 0.0% 0.0% 50.0% (n=1) 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 9.4% (n=30) 0.0% 0.0% 2.1% (n=1) 0.0% 0.0% Bivalvia (larvae) 0.0% 0.0% 1.2% (n=16) 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 14.8% (n=47) Bryozoa (larvae) 6.4% (n=3) 100.0% (n=2) 0.0% 0.0% 0.0% 9.2% (n=126) 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 1.3% (n=4) Calanoida (ci-ciii) 0.0% 0.0% 0.1% (n=1) 0.0% 100.0% (n=1) 0.0% 4.3% (n=2) 0.0% 0.0% 0.0% 25.0% (n=1) 50.0% (n=1) 0.6% (n=2) Calanus spp. 80 0.0% 0.2% (n=3) 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% Centropages spp. 0.0% 2.5% (n=8) Cirripedia (larvae) 0.0% 3.9% (n=54) 0.0% 0.0% 0.0% 19.1% (n=9) 0.0% 0.0% 0.0% 50.0% (n=2) 4.4% (n=14) Copepoda (nauplii) 0.0% 5.5% (n=76) 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 1.3% (n=18) 0.0% 0.0% 0.0% 0.0% 2.8% (n=9) Echinodermata (larvae) 6.4% (n=3) 11.1% (n=1) 0.9% (n=13) 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% Euphausiacea (larvae) Taxa 60 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.9% (n=3) 0.0% 5.4% (n=74) Euphausiacea (nauplii) 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% Predicted Eurytemora spp. 0.0% 1.3% (n=18) 0.0% 25.0% (n=1) 8.5% (n=4) 16.0% (n=51) 0.0% 2.1% (n=29) 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% Evadne spp. 50.0% (n=1) 0.0% 0.0% 0.0% 1.4% (n=19) 0.0% 0.0% 0.0% 0.0% 0.0% Fritillaria spp. 0.0% 8.5% (n=4) 1.3% (n=4) 0.0% 0.0% 0.0% 0.0% 100.0% (n=1) 2.1% (n=1) 0.0% 0.0% 0.0% 0.0% 0.0% 12.3% (n=39) 40 Gastropoda (larvae/Limacina) 0.0% 9.9% (n=136) 0.0% 0.0% 0.0% 0.0% 0.0% 83.3% (n=5) 0.0% 0.0% 0.0% 0.6% (n=2) Harpacticoida- epibenthic Microcalanus spp. 0.0% 5.6% (n=77) 50.0% (n=1) 0.0% 0.0% 4.3% (n=2) 0.0% 0.0% 0.0% 0.0% 0.0% 3.8% (n=12) Obelia spp. (medusa) 77.8% (n=7) 0.0% 0.0% 0.0% 0.0% 25.5% (n=12) 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.2% (n=3) 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% Oikopleura spp. 0.0% 0.0% 20 0.0% 18.4% (n=252) 0.0% 0.0% 0.0% Oithona spp. 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 2.5% (n=8) 0.0% 0.0% 18.2% (n=58) Podon/Pleopsis spp. 0.5% (n=7) 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 8.5% (n=4) Polychaeta (larvae) 11.1% (n=1) 0.1% (n=2) 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 7.2% (n=23) 4.3% (n=2) 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.9% (n=3) Pseudocalanus spp. 0.0% 11.2% (n=153) 0.0% 16.7% (n=1) 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.3% (n=1) Temora spp. 7.4% (n=101) 0.0% Decapoda-non brachyura (larvae) Calanoida "Calanoida (civ-vi) Sarsia spp. " (medusa) Aglantha n=1370 n=9 (med_{USa}) Oncaeidae spp. Zooplankton (unid) Cyclopoida " (unid) Hydrozoa (medusa) Tortanus spp. Monstrillidae Ostracoda Extra training classes

Actual discarded Taxa

Relative Abundance of Top Taxonomic Instances per Sample



