Use of SCN features: Yes

Actual Values

Max learning objects: 5000 objects/class Strategy N° 7

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

Confusion Matrix - In percent of Actual Value

Classification Report Matrix max 5000 learning objects per class

precision recall f1-score

								C	ontusio	on Ma	trix – I	In per	cent of	t Actua	al Val	ue								IIIE	ax Jood tea	irining obje	cis per cit
																									precision	recall	f1-score
Acartia spp.			7%	11%	1%		<1%	2%	<1%	7%			<1%			<1%	<1%		<1%		3%	<1%		Acartia spp. (n=2490-train=5000)	0.77	0.66	0.71
Evadne spp.	. <1%	87%	<1%	<1%	<1%	<1%	4%	<1%			<1%	2%	<1%	6%	<1%				<1%					Evadne spp. (n=1931-train=5000)	0.91	0.87	0.89
Temora spp.		2%	55%	9%	2%	<1%	<1%			7%			<1%	<1%			<1%		<1%		4%			Temora spp. (n=1416-train=5000)	0.67	0.55	0.60
Pseudocalanus spp.			10%	53%				3%		8%							<1%		<1%	<1%		<1%		Pseudocalanus spp. (n=1044-train=4845)		0.53	0.54
Oithona spp.			<1%	<1%				2%		3%	<1%		<1%			2%					<1%			Oithona spp.	0.74	0.77	0.75
Bryozoa (larvae)		25%		·	<1%	59%	2%	2%			2%		<1%			<1%			<1%					(n=345-train=5000)  Bryozoa (larvae)			
Podon/Pleopsis spp.				2%			24%	6%	<1%			<1%		<1%			<1%		14%		3%		7%	(n=248-train=1142)	0.90	0.59	0.71
Calanoida (ci-ciii)		14%			5%		12%	25%		4%							<1%		2%	<1%	5%		<1%	Podon/Pleopsis spp. (n=230-train=5000)	0.35	0.24	0.29
Oikopleura spp.			4%		2%				74%	<1%						9%		2%				20.	6%	Calanoida (ci-ciii) (n=130-train=5000)	0.12	0.25	0.16
Centropages spp.		20,	3%	1%	100		204	204	20,	81%	160			20,		E00x			20,			3%	2%	Oikopleura spp. (n=115-train=5000)	0.72	0.74	0.73
Echinodermata (larvae)		2%			18%		2% 6%	2%	2%		16%	619		2% 4%	150/	50%			2% 11%				2%	Centropages spp. (n=88-train=3620)	0.16	0.81	0.26
Gastropoda (larvae/Limacina)		2%	6%	13%	4%		0%	6%				64%	40%	4%	15%				11%		9%			Echinodermata (larvae)	0.40	0.16	0.23
Harpacticoida- epibenthic Hydrozoa (medusa)		Ζ/0	4%	13%	4/0	6%	9%	0/0			2%		40%	49%		15%				2%	9/0		13%	(n=50-train=3043)  Gastropoda (larvae/Limacina)			
Bivalvia (larvae)			770			7%	2%				∠′0	9%		7%	70%	15/0			5%	270			15/0	(n=47-train=3272)	0.59	0.64	0.49
Fritillaria spp.					12%	770	270		41%		3%	970		7 10	7 0/0	44%			J/0					Harpacticoida- epibenthic (n=47-train=555)	0.54	0.40	0.46
Microcalanus spp.		10%	13%	13%	1270		10%	26%	1170		3/0	3%	3%			1 1/0	16%		3%		3%			Hydrozoa (medusa) (n=47-train=4052)	0.14	0.49	0.22
Chaetognatha		10.0	15.0	13.0			100	200	43%			3 0	3 0				100	50%	4%	4%	3.0			Bivalvia (larvae) (n=44-train=3764)	0.78	0.70	0.74
Polychaeta (larvae)		10%	5%	5%	5%		5%		10 0			5%							55%				5%	Fritillaria spp. (n=34-train=5000)	0.20	0.44	0.28
Calanus spp.				7%						7%										86%				Microcalanus spp. (n=31-train=80)	0.45	0.16	0.24
Eurytemora spp.			20%	30%						30%											10%			Chaetognatha	0.00	0.50	0.64
Tortanus spp.										50%												50%		(n=28-train=89)  Polychaeta (larvae)			
)ecapoda-non brachyura (larvae)																				100%				(n=20-train=1577)	0.17	0.55	0.27
		Evad.	Temo	PSEL.	Oith	Bryo.	Pode	Calar	Oiko.	Cenz	Chir	Cash	Harp	Hydr	Biva	Priting	, Micr.	Chap	Poly		Euro.	Torte	Oece	Calanus spp. (n=14-train=359)	0.67	0.86	0.75
	U	ig Spp.	ine Spp.	Sold	Oithon Sp.	Bryozo	Podon, Po	Pleopsis St.	Oitople Oida (ci. ciii)	Centrop	Chinology Spp.	Yermata (	DOUG (lar.	Hydro Chicolda Chicol	Tod (med)	Nia Carrae	Microd	Chack Spp.	ognatha	haeta lana	Euryn Spp.	Tortani emora Spp.	Decape Spp.	Eurytemora spp. (n=10-train=1818)	0.00	0.10	0.01
					82	Žė,	ツ	, %,		•	.20	(10)	Tapac, Tarae,	Climaci.	ibenthic	(A)		20.		· A	Per	~.		Eurytemora spp. (n=10-train=1818)  Tortanus spp. (n=2-train=203)  Decapoda-non brachyura (larvae)	0.17	0.50	0.25
														(Pa)	1									Decapoda-non brachyura (larvae) (n=1-train=423)	0.00	0.00	0.00
											Predi	cted V	alues											macro avg		0.50	0.44
																								weighted avg	0.72	0.65	0.67

## Predictions of discarded taxa from training 100 0.0% 36.6% (n=502) 0.0% 0.0% 0.0% 33.3% (n=2) 0.0% 0.0% 1.3% (n=4) Acartia spp. Bivalvia (larvae) 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 4.4% (n=14) 0.3% (n=4) 0.0% 0.0% 0.0% 0.0% 0.0% 100.0% (n=2) 0.0% Bryozoa (larvae) 7.5% (n=24) 0.0% 11.6% (n=159) 50.0% (n=1) 0.0% 0.0% 0.0% 0.0% 0.0% 3.1% (n=10) Calanoida (ci-ciii) 80 Calanus spp. 33.3% (n=3) 0.1% (n=1) 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.3% (n=1) 100.0% (n=1) 0.0% 0.0% 0.0% 0.0% 0.0% 25.0% (n=1) 0.0% 3.1% (n=42) Centropages spp. 0.0% Decapoda-non brachyura (larvae) 11.1% (n=1) 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.6% (n=2) Echinodermata (larvae) 0.0% 0.1% (n=1) 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.3% (n=1) 0.0% 60 Eurytemora spp. 0.0% 4.9% (n=67) 0.0% 0.0% 0.0% 16.7% (n=1) 0.0% 0.0% **Predicted Taxa** 0.0% 50.0% (n=1) 0.0% 0.0% 0.0% 0.0% 0.0% 21.1% (n=67) Evadne spp. 5.7% (n=78) Fritillaria spp. 0.0% 0.4% (n=6) 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 2.5% (n=8) 0.0% Gastropoda (larvae/Limacina) 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 14.8% (n=47) 0.0% 0.0% Harpacticoida- epibenthic 0.0% 0.4% (n=5) 0.0% 0.0% 50.0% (n=3) 0.0% 0.6% (n=2) 40 Hydrozoa (medusa) 55.6% (n=5) 0.1% (n=2) 0.0% 0.0% 0.0% 0.0% 0.0% 75.0% (n=3) 12.3% (n=39) Microcalanus spp. 0.0% 0.1% (n=2) 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% Oikopleura spp. 1.5% (n=21) 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% Oithona spp. 0.0% 10.1% (n=139) 0.0% 0.0% 0.0% 0.0% 3.5% (n=11) 20 1.3% (n=18) 0.0% 0.0% Podon/Pleopsis spp. 0.0% 100.0% (n=1) 0.0% 0.0% 0.0% 13.8% (n=44) Polychaeta (larvae) 0.0% 0.0% 0.0% 0.7% (n=10) 0.0% 0.0% 0.0% 0.0% 8.5% (n=27) Pseudocalanus spp. 0.0% 12.1% (n=166) 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 4.1% (n=13) 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 10.7% (n=147) 1.3% (n=4) Temora spp. 0 Sarsia spp. (medusa) Aglantha spp. (medusa) Cyclopoida (unid) Monstrillidae Oncaeidae spp. Zooplankton (unid) Calanoida "== 1370 (civ-vi) Foraminifera" Ostracoda n=6 1=1

Actual discarded Taxa

Relative Abundance of Top Taxonomic Instances per Sample



