Use of SCN features: Yes

Max learning objects: 20000 objects/class Strategy N° 7

Actual Values

## NL 2020 Selected Samples prediction using all regions training set, Learning with selected samples classes with no low global 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 20000 learning objects per class	

precision recall f1-score

							(	_ontusio	on Matr	ıx – In p	percent	of Actu	ıal Valu	9							IIIC		,		55
																						precision	recall	f1-score	
Temora spp.	59%	19%	4%	12%	1%	<1%	3%	<1%	<1%			<1%	<1%			<1%		<1%	<1%	<1%	<b>Temora spp.</b> (n=18103-train=7347)	0.76	0.59	0.66	
Acartia spp.		70%	2%	4%	2%	<1%	1%		1%		<1%		<1%			<1%			<1%	<1%	Acartia spp. (n=13302-train=20000)	0.68	0.70	0.69	
Evadne spp.		<1%	89%	<1%		6%	<1%	<1%	<1%	<1%		2%	<1%				<1%		<1%	<1%	Evadne spp. (n=5228-train=11064)	0.83	0.89	0.86	
Pseudocalanus spp.		25%	<1%	40%	4%	<1%	3%		<1%				<1%	<1%				<1%	<1%	<1%	Pseudocalanus spp. (n=3053-train=4845)	0.30	0.40	0.34	1.0
Centropages spp.		4%	002	<1%	86%	23%	20,						-10					<1%	40,	100	Centropages spp. (n=330-train=3620)	0.31	0.86	0.46	
Podon/Pleopsis spp.		34%	9% 5%	3%		25%	2% 45%		2%				<1%					8%	4%	18%	Podon/Pleopsis spp. (n=253-train=7347)	0.11	0.23	0.14	
Eurytemora spp.	9%	34%		3/0			43%	F-70	2/0	70		F0	<1/a							20					
Gastropoda (larvae/Limacina)		00.	<1%			28%		57%	070	7%		5%				20.	40.			2%	Eurytemora spp. (n=178-train=1818)		0.45	0.17	0.8
Oithona spp.		9%	1%					004	87%	000		20,				2%	1%				Gastropoda (larvae/Limacina) (n=112-train=3272)	0.51	0.57	0.54	
Bivalvia (larvae) Oikopleura spp.					1%			8%		90%	76%	2%		1%	4%	10%		7%			Oithona spp. (n=98-train=5881)	0.19	0.87	0.31	
Hydrozoa (medusa)	5%		5%		2%	2%					7 070	34%		3%	170	2%		3%	44%	2%	Bivalvia (larvae) (n=92-train=3764)	0.90	0.90	0.90	0.6
Harpacticoida- epibenthic		42%		30%	2%		2%						18%								Oikopleura spp. (n=70-train=5305)	0.79	0.76	0.77	
Calanus spp.				4%										64%				32%			Hydrozoa (medusa) (n=64-train=4052)	0.17	0.34	0.23	
Chaetognatha				7%							20%				73%						Harpacticoida- epibenthic (n=50-train=555)	0.23	0.18	0.20	0.4
Fritillaria spp.		14%									14%					57%	14%				Calanus spp. (n=25-train=359)	0.76	0.64	0.70	
Echinodermata (larvae)			20%			20%			20%		20%					20%					Chaetognatha (n=15-train=89)	0.79	0.73	0.76	
Decapoda-non brachyura (larvae)																		100%					0.57	0.10	0.2
Obelia spp. (medusa)																			100%		Fritillaria spp. (n=7-train=6992)		0.57	0.10	0.2
Polychaeta (larvae)				100%																	Echinodermata (larvae) (n=5-train=3043)	0.00	0.00	0.00	
	Temoro	Acarria Spp.	Spp.	Sp. Selidor	Centrop Calanus Spp.	Podon/	Curyten, Oleopsis Spp.	Castropo Pora Spp.	Oithona Ooda (la	Biralvia Spp.	Oikoplel (lande)	Hydrox	Harpacition (medisa)	Colda Calanus	Chaetog.	Prililari	ia Schinode	Decapol	Obelia Starton brachy	Polycho	Decapoda-non brachyura (larvae) (n=2-train=423)  Obelia spp. (medusa) (n=1-train=1003)	0.05	1.00	0.09	
		<i>2</i> .	χ,	<i>X</i> ,	Anus Spp.	<i>SD</i> .	Opsis Spp.	<sup>5</sup> 1/2).	Oithona Poda (larvae/L)	~?! ?}.	an <sub>ae</sub> ,	* 50p.	(medusa)	Colonus Coida Chiben	~p.	Th <sub>a</sub>	<sup>3</sup> 0/2.	Decapole of Mariae	non brachy	". (medysa)	Obelia spp. (medusa) (n=1-train=1003)	0.01	1.00	0.02	0.0
										acina)					II <sub>C</sub>				Obelia Stachy	a (lange)	Polychaeta (larvae) (n=1-train=1577)	0.00	0.00	0.00	
										Predicted	d Values										macro avg	0.38	0.58	0.40	
																					weighted avg	0.69	0.65	0.67	

## Predictions of discarded taxa from training 100 0.0% 0.0% 0.0% 18.8% (n=6) 0.0% 0.0% 31.5% (n=1439) 0.0% 0.0% 5.4% (n=61) Acartia spp. 0.0% 0.0% 0.0% Bivalvia (larvae) 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 2.9% (n=33) 40.0% (n=4) 100.0% (n=1) 50.0% (n=3) 0.0% 42.9% (n=6) 0.0% 0.0% (n=2) 0.0% 0.0% Calanus spp. 50.0% (n=1) 0.0% 0.0% 0.0% 3.1% (n=1) 0.0% 0.0% 1.1% (n=50) 0.0% 0.0% 0.4% (n=4) Centropages spp. 80 0.1% (n=1) 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% Decapoda-non brachyura (larvae) 7.1% (n=1) 0.1% (n=3) Echinodermata (larvae) 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% (n=2) 0.0% 0.0% 0.6% (n=7) 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.5% (n=6) Eurytemora spp. 6.2% (n=2) 4.2% (n=192) 0.0% Evadne spp. 0.0% 0.0% 0.0% 0.0% 0.0% 16.3% (n=743) 0.0% 0.0% 32.9% (n=370) Taxa 60 Fritillaria spp. 0.0% 0.0% 16.7% (n=1) 0.0% 0.0% 0.0% 0.3% (n=12) 0.0% 0.0% 0.8% (n=9) Predicted Gastropoda (larvae/Limacina) 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.4% (n=20) 0.0% 0.0% 6.9% (n=77) 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.2% (n=2) Harpacticoida- epibenthic 0.2% (n=9) 0.0% 40 0.0% Hydrozoa (medusa) 20.0% (n=2) 0.0% 0.0% 0.0% 0.0% 0.2% (n=8) 0.0% 0.0% 7.6% (n=85) 0.0% 33.3% (n=2) 0.0% 0.0% 0.0% 0.3% (n=15) 0.0% 1.2% (n=13) Obelia spp. (medusa) 40.0% (n=4) 0.0% 0.7% (n=8) 0.0% 100.0% (n=1) Oikopleura spp. 0.0% 0.0% 0.0% 0.0% 0.0% 0.1% (n=3) 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 2.1% (n=24) Oithona spp. 7.2% (n=330) 20 Podon/Pleopsis spp. 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 30.1% (n=338) 5.5% (n=253) 0.0% 0.0% 0.0% 0.0% 0.0% 50.0% (n=1) 2.0% (n=90) 0.0% 0.0% 4.6% (n=52) Polychaeta (larvae) 0.0% Pseudocalanus spp. 0.0% 0.0% 62.5% (n=20) 42.9% (n=6) 0.0% 8.7% (n=395) 50.0% (n=1) 0.0% 0.6% (n=7) 0.0% 0.0% 0.0% 50.0% (n=1) 21.8% (n=996) 0.0% Temora spp. 9.4% (n=3) 7.1% (n=1) 0.0% 2.3% (n=26) 0 Anthoathecata (medusa) $Agl_{anth_{a}} \int_{spp.}^{n=1} (m_{edusa})$ Calanoida (unid) Cnidaria (larvae) Metridia spp. Zooplankton (unid) Chiridius spp. Tomopteris spp. Copepode nerid n=1123 n=2 n=1

Actual discarded Taxa

Relative Abundance of Top Taxonomic Instances per Sample Val Pred 1.0 -0.8 -Relative Abundance 0.4 0.2 -0.0 S21 S22 S23 S24 S25 S26 S27 S28 S29 S30

Sample Short ID

