Use of SCN features: Yes
Max learning objects: 20000 objects/class
Strategy N° 3

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
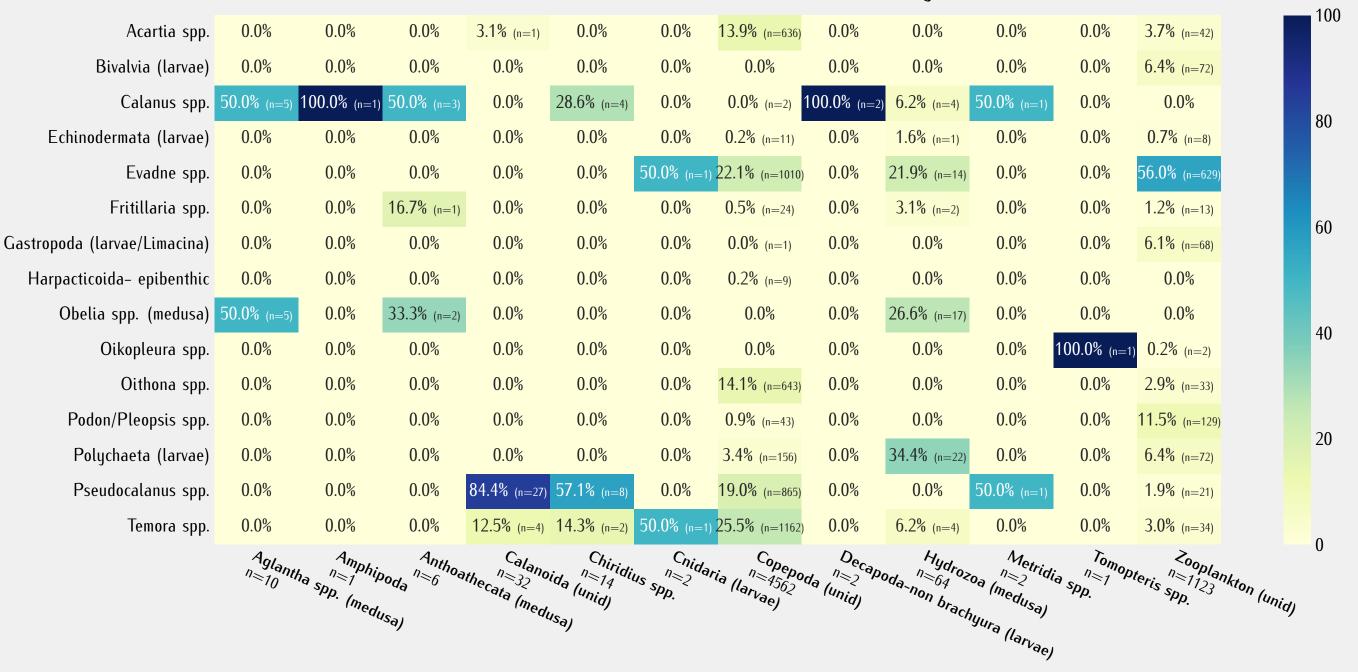
Confusion Matrix - In percent of Actual Value

Actual \ Predicted	Temora spp.	Acartia spp.	Evadne spp.	Pseudocalanus spp.	Centropages spp.	Podon/Pleopsis spp.	Eurytemora spp.	Gastropoda (larvae/Limacina)	Oithona spp.	Bivalvia (larvae)	Oikopleura spp.	Harpacticoida- epibenthic	Calanus spp.	Chaetognatha	Fritillaria spp.	Echinodermata (larvae)	Obelia spp. (medusa)	Polychaeta (larvae)
Temora spp.	62%	10%	5%	19%			<1%		3%			<1%			<1%	<1%		1%
Acartia spp.	22%	60%	2%	11%			<1%		3%			<1%			<1%	<1%		<1%
Evadne spp.	<1%	<1%	96%	<1%		2%		<1%	<1%	<1%						<1%		<1%
Pseudocalanus spp.	32%	17%	<1%	50%					<1%			<1%			<1%			<1%
Centropages spp.	22%	72%				4%	2%											
Podon/Pleopsis spp.	27%	<1%	19%	4%		13%			<1%				<1%			<1%		34%
Eurytemora spp.	35%	15%	12%	18%					19%			<1%						<1%
Gastropoda (larvae/Limacina)			13%			27%		33%	14%									12%
Oithona spp.		5%	4%	1%					87%						3%			
Bivalvia (larvae)								17%		83%								
Oikopleura spp.	1%	1%									71%		1%	1%	23%			
Harpacticoida- epibenthic	12%	20%	2%	36%					8%			22%						
Calanus spp.				16%									84%					
Chaetognatha				7%							20%			73%				
Fritillaria spp.									14%						86%			
Echinodermata (larvae)			20%			20%			20%						40%			
Obelia spp. (medusa)																	100%	
Polychaeta (larvae)				100%														

Actual Values / Predicted Values

Classification Report Matrix
max 20000 learning objects per class

	precision	recall	f1-score
Temora spp. (n=18103-train=5148)	0.73	0.62	0.67
Acartia spp. (n=13302-train=5448)	0.76	0.60	0.67
Evadne spp. (n=5228-train=2845)	0.78	0.96	0.86
Pseudocalanus spp. (n=3053-train=4552)	0.23	0.50	0.32
Centropages spp. (n=330-train=40)	1.00	0.02	0.05
Podon/Pleopsis spp. (n=253-train=201)	0.20	0.13	0.16
Eurytemora spp. (n=178-train=88)	0.00	0.00	0.00
Gastropoda (larvae/Limacina) (n=112-train=110)	0.54	0.33	0.41
Oithona spp. (n=98-train=1409)	0.07	0.87	0.13
Bivalvia (larvae) (n=92-train=71)	0.78	0.83	0.80
Oikopleura spp. (n=70-train=761)	0.94	0.71	0.81
Harpacticoida- epibenthic (n=50-train=136)	0.23	0.22	0.22
Calanus spp. (n=25-train=213)	0.91	0.84	0.87
Chaetognatha (n=15-train=67)	0.92	0.73	0.81
Fritillaria spp. (n=7-train=3447)	0.05	0.86	0.10
Echinodermata (larvae) (n=5-train=276)	0.00	0.00	0.00
Obelia spp. (medusa) (n=1-train=43)	1.00	1.00	1.00
Polychaeta (larvae) (n=1-train=452)	0.00	0.00	0.00
macro avg	0.51	0.51	0.44
weighted avg	0.70	0.64	0.65

Predictions of discarded taxa from training

Predicted Taxa \ Actual discarded Taxa	Aglantha spp. (medusa) n=10	Amphipoda n=1	Anthoathecata (medusa) n=6	Calanoida (unid) n=32	Chiridius spp. n=14	Cnidaria (larvae) n=2	Copepoda (unid) n=4562	Decapoda-non brachyura (larvae) n=2	Hydrozoa (medusa) n=64	Metridia spp. n=2	Tomopteris spp. n=1	Zooplankton (unid) n=1123
Acartia spp.	0.0%	0.0%	0.0%	3.1% (n=1)	0.0%	0.0%	13.9% (n=636)	0.0%	0.0%	0.0%	0.0%	3.7% (n=42)
Bivalvia (larvae)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.4% (n=72)
Calanus spp.	50.0% (n=5)	100.0% (n=1)	50.0% (n=3)	0.0%	28.6% (n=4)	0.0%	0.0% (n=2)	100.0% (n=2)	6.2% (n=4)	50.0% (n=1)	0.0%	0.0%
Echinodermata (larvae)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2% (n=11)	0.0%	1.6% (n=1)	0.0%	0.0%	0.7% (n=8)
Evadne spp.	0.0%	0.0%	0.0%	0.0%	0.0%	50.0% (n=1)	22.1% (n=1010)	0.0%	21.9% (n=14)	0.0%	0.0%	56.0% (n=629)
Fritillaria spp.	0.0%	0.0%	16.7% (n=1)	0.0%	0.0%	0.0%	0.5% (n=24)	0.0%	3.1% (n=2)	0.0%	0.0%	1.2% (n=13)
Gastropoda (larvae/Limacina)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0% (n=1)	0.0%	0.0%	0.0%	0.0%	6.1% (n=68)
Harpacticoida- epibenthic	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2% (n=9)	0.0%	0.0%	0.0%	0.0%	0.0%
Obelia spp. (medusa)	50.0% (n=5)	0.0%	33.3% (n=2)	0.0%	0.0%	0.0%	0.0%	0.0%	26.6% (n=17)	0.0%	0.0%	0.0%
Oikopleura spp.	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0% (n=1)	0.2% (n=2)
Oithona spp.	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	14.1% (n=643)	0.0%	0.0%	0.0%	0.0%	2.9% (n=33)
Podon/Pleopsis spp.	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9% (n=43)	0.0%	0.0%	0.0%	0.0%	11.5% (n=129)
Polychaeta (larvae)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.4% (n=156)	0.0%	34.4% (n=22)	0.0%	0.0%	6.4% (n=72)
Pseudocalanus spp.	0.0%	0.0%	0.0%	84.4% (n=27)	57.1% (n=8)	0.0%	19.0% (n=865)	0.0%	0.0%	50.0% (n=1)	0.0%	1.9% (n=21)
Temora spp.	0.0%	0.0%	0.0%	12.5% (n=4)	14.3% (n=2)	50.0% (n=1)	25.5% (n=1162)	0.0%	6.2% (n=4)	0.0%	0.0%	3.0% (n=34)

Predicted Taxa

Actual discarded Taxa

Relative Abundance of Top Taxonomic Instances per Sample