Use of SCN features: Yes

Actual Values

Max learning objects: Maximum objects/class

Strategy N° 4

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

Confusion Matrix - In percent of Actual Value

max	Classification Report Matrix available learning objects per class			ass
ma/	precision	recall	f1-score	133
Temora spp. (n=18103-train=5148)	0.74	0.53	0.62	
Acartia spp. (n=13302-train=5448)	0.77	0.57	0.66	
Evadne spp. (n=5228-train=2845)	0.87	0.93	0.90	
Pseudocalanus spp. (n=3053-train=4552)	0.25	0.45	0.32	
Centropages spp. (n=330-train=40)	1.00	0.02	0.03	
Podon/Pleopsis spp. (n=253-train=201)	0.19	0.10	0.13	
Eurytemora spp. (n=178-train=88)	0.00	0.00	0.00	
Gastropoda (larvae/Limacina) (n=112-train=110)	0.47	0.30	0.37	
Oithona spp. (n=98-train=1409)	0.11	0.85	0.20	
Bivalvia (larvae) (n=92-train=71)	0.77	0.82	0.79	
Oikopleura spp. (n=70-train=761)	0.95	0.74	0.83	
Harpacticoida- epibenthic (n=50-train=136)	0.34	0.24	0.28	
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)	0.06	0.71	0.11	
Echinodermata (larvae) (n=5-train=276)	0.00	0.00	0.00	
Obelia spp. (medusa) (n=1-train=43)	0.50	1.00	0.67	
Polychaeta (larvae) (n=1-train=452)	0.00	0.00	0.00	
Bryozoa (larvae) (n=0-train=119)	-	-	-	
Calanoida (ci-ciii) (n=0-train=3713)	-	-	-	
Cirripedia (larvae) (n=0-train=611)	-	-	-	
Copepoda (nauplii) (n=0-train=1025)	-	-	-	
Microcalanus spp. (n=0-train=80)	-	_	-	
Euphausiacea (larvae) (n=0-train=75)	-	_	-	
Euphausiacea (nauplii) (n=0-train=122)	-	_	-	
macro avg (corr)	0.49	0.49	0.42	

weighted avg

0.58

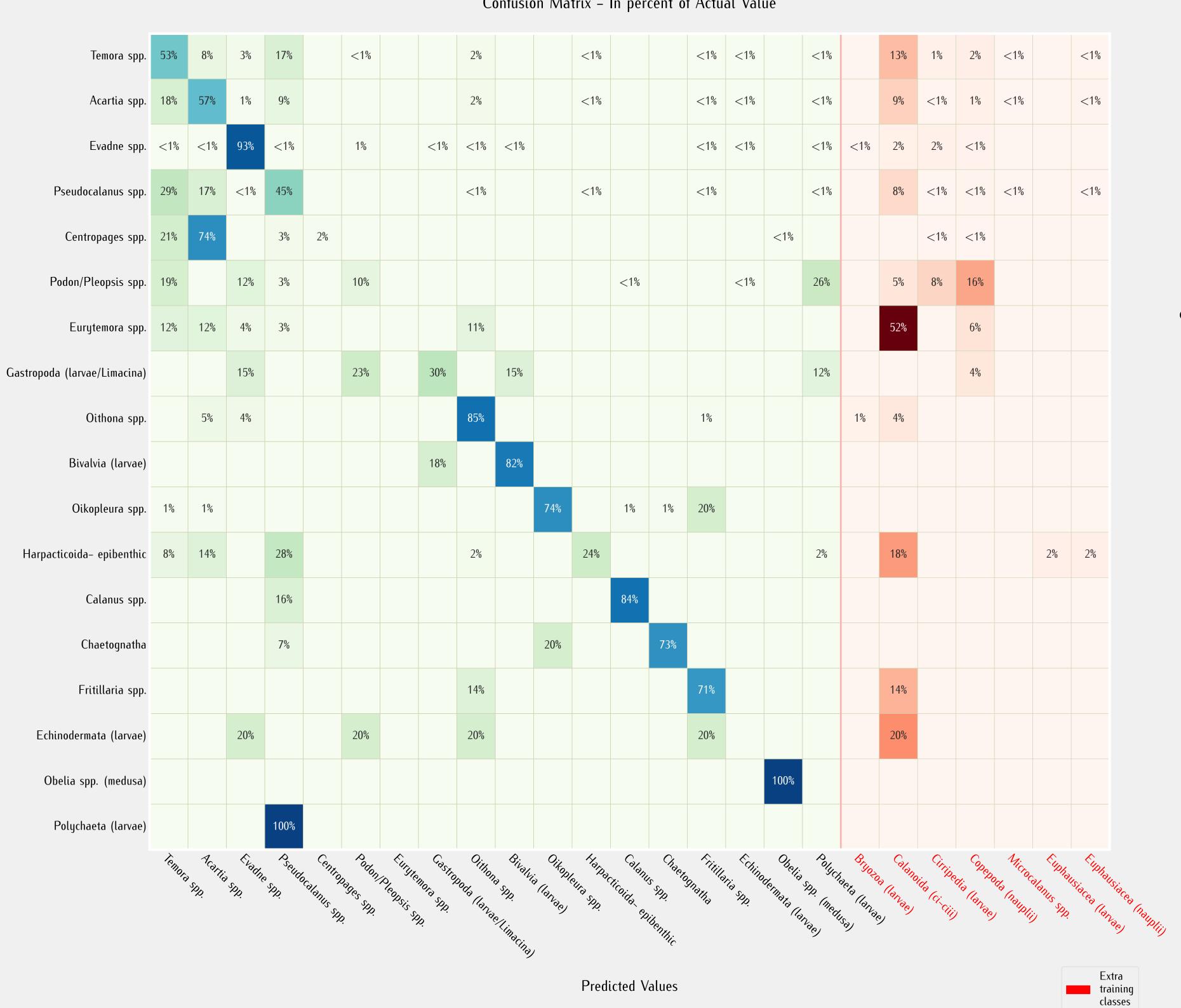
recall

0.72

precision

0.63

f1-score



0.0% 0.0% 0.0% 3.1% (n=1) 0.0% 0.0% 10.8% (n=491) 0.0% 0.0% 0.0% 0.0% 3.5% (n=39) Acartia spp. 7.2% (n=81) 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% Bivalvia (larvae) Bryozoa (larvae) 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.5% (n=6) 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 6.3% (n=71) Calanoida (ci-ciii) 9.4% (n=3) 0.0% 0.0% 26.6% (n=1213) 0.0% 80 Calanus spp. 50.0% (n 0.0% 0.0% 100.0% (n=1) 0.0% (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) 7.1% (n=1) 1.7% (n=19) Cirripedia (larvae) 0.0% 0.0% 0.0% 0.0% 0.0% 2.0% (n=93) 0.0% 15.6% (n=10) 0.0% 0.0% Copepoda (nauplii) 0.0% 0.0% 0.0% 0.0% 0.0% 50.0% (n=1) 8.1% (n=370) 0.0% 3.1% (n=2) 0.0% 0.0% 4.3% (n=48) Echinodermata (larvae) 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.1% (n=3) 0.0% 0.0% 0.0% 0.0% 0.5% (n=6) Euphausiacea (nauplii) 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.5% (n=22) 0.0% 0.0% 0.0% 0.0% 0.0% 60 Evadne spp. 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 12.6% (n=576) 0.0% 20.3% (n=13) 0.0% 0.0% 50.0% (n=561) 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% 0.9% (n=10) Gastropoda (larvae/Limacina) 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% (n=2) 0.0% 0.0% 0.0% 0.0% 5.7% (n=64) 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.1% (n=5) 0.0% 0.0% 0.0% 0.0% 0.0% Harpacticoida- epibenthic 40 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% Microcalanus spp. 0.0% 0.0% 0.2% (n=10) 0.0% 33.3% (n=2) 0.0% 0.1% (n=1) Obelia spp. (medusa) 50.0% (n=5) 0.0% 0.0% 0.0% 0.0% 0.0% 23.4% (n=15) 0.0% 0.0% 0.3% (n=3) Oikopleura spp. 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 100.0% (n=1) Oithona spp. 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 7.9% (n=360) 0.0% 0.0% 0.0% 0.0% 1.2% (n=13) 20 Podon/Pleopsis spp. 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.7% (n=30) 0.0% 0.0% 0.0% 0.0% 10.2% (n=114) Polychaeta (larvae) 0.0% 0.0% 0.0% 0.0% 25.0% (n=16) 0.0% 0.0% 5.7% (n=64) 0.0% 0.0% 2.0% (n=92) 0.0% 0.0% 0.0% 0.0% 50.0% (n=1) 0.0% 0.6% (n=7) Pseudocalanus spp. 0.0% 81.2% (n=26) 57.1% (n=8 0.0% 13.5% (n=617) 0.0% 0.0% 0.0% 0.0% 14.3% (n=652) 3.1% (n=2) 0.0% 0.0% 1.4% (n=16) 6.2% (n=2) 7.1% (n=1) 50.0% (n=1) 0.0% Temora spp. Decapoda-non brachyura (larvae) Anthoathecata (medusa) Zooplankton (unid) Calanoida (unid) Cnidaria (larvae) Chiridius spp. Copepoda "=< ... n=4562 (unid) Metridia spp. Tomopteris spp. n=2 Extra training classes

Predicted Taxa

Predictions of discarded taxa from training

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 S25 S21 S22 S23 S24 S26 S27 S28 S29 S30

Sample Short ID

