Use of SCN features: No

Max learning objects: 20000 objects/class Strategy N° 1

Actual Values

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

Confusion Matrix In parcent of Actual Value

									Confu	sion N	/latrix	– In p	ercen	t of A	ctual	Value							
Temora spp.	60%	10%	5%	20%		<1%		3%	<1%			<1%					<1%	<1%				2%	
Acartia spp.	26%	54%	2%	13%		<1%		3%		<1%		<1%					<1%	<1%				<1%	
Evadne spp.	1%	<1%	94%	<1%		3%	<1%	<1%	<1%									<1%				<1%	
Pseudocalanus spp.	31%	16%	<1%	51%		<1%		<1%				<1%	<1%				<1%	<1%				<1%	
Centropages spp.	26%	65%		4%	5%							<1%									<1%		
Podon/Pleopsis spp.	25%	<1%	14%	4%		12%		<1%					<1%					1%				42%	
Eurytemora spp.	34%	12%	9%	17%		<1%		19%				4%										4%	
Gastropoda (larvae/Limacina)			12%			32%	31%		11%													14%	
Oithona spp.		5%	4%					87%				1%					2%					1%	
Bivalvia (larvae)							8%		92%														
Oikopleura spp.	1%	1%								69%			1%	3%			24%						
Hydrozoa (medusa)	3%	2%	12%								9%		2%			22%	3%				22%	25%	
Harpacticoida- epibenthic		18%	2%	32%				2%				34%										2%	
Calanus spp.				16%									80%						4%				
Chaetognatha				7%									0.00	80%									13%
Chiridius spp.				64%							200.		29%			400.					200.		400
Aglantha spp. (medusa)								2004			20%					40%	710				30%		10%
Fritillaria spp. Echinodermata (larvae)			20%			20%		29%									71%						
Metridia spp.			20/0	50%		20%		70/0					50%				2070						
Decapoda-non brachyura (larvae)				300									100%										
Cnidaria (larvae)													1000					50%					
Obelia spp. (medusa)																					100%		
Polychaeta (larvae)				100%																			
Amphipoda													100%										
Tomopteris spp.										100%													
	Temore.	Acartle Spp.	. Spp.	Pseude Sp.	Centrope Sp.	Podon/Pleops	Castro Vienora Spp.	Oithold (lan	Bivally Spp. Selimacing	Oikopi (lande)	Hydro, Spp.	Harpai (medus	Calanus Aicoida Cal	Chaelo, Spp. Shenthic	Chirida Anatha	Aglann, Spp.	Sp. (m	Chino Spp. Sdusa)	Metridiale (Decapoda no	Pidaria (lange)	Polych (ned	Amphipoda larvae)
										Predicted Values													

ma		ation Reporearning obje	rt Matrix ects per cla	SS
	precision	recall	f1-score	
Temora spp. (n=18103-train=5148)	0.70	0.60	0.65	
Acartia spp. (n=13302-train=5448)	0.74	0.54	0.63	
Evadne spp. (n=5228-train=2845)	0.80	0.94	0.87	
Pseudocalanus spp. (n=3053-train=4552)	0.22	0.51	0.31	
Centropages spp. (n=330-train=40)	1.00	0.05	0.10	1
Podon/Pleopsis spp. (n=253-train=201)	0.11	0.12	0.12	
Eurytemora spp. (n=178-train=88)	0.00	0.00	0.00	
Gastropoda (larvae/Limacina) (n=112-train=110)	0.59	0.31	0.41	
Oithona spp. (n=98-train=1409)	0.08	0.87	0.14	O
Bivalvia (larvae) (n=92-train=71)	0.79	0.92	0.85	
Oikopleura spp. (n=70-train=761)	0.96	0.69	0.80	
Hydrozoa (medusa) (n=64-train=21)	0.75	0.09	0.17	
Harpacticoida- epibenthic (n=50-train=136)	0.09	0.34	0.14	O
Calanus spp. (n=25-train=213)	0.62	0.80	0.70	
Chaetognatha (n=15-train=67)	0.86	0.80	0.83	
Chiridius spp. (n=14-train=1)	0.00	0.00	0.00	O
Aglantha spp. (medusa) (n=10-train=21)	0.22	0.40	0.29	
Fritillaria spp. (n=7-train=3447)	0.05	0.71	0.09	
Echinodermata (larvae) (n=5-train=276)	0.00	0.00	0.00	
Metridia spp. (n=2-train=15)	0.00	0.00	0.00	C
capoda-non brachyura (larvae) (n=2-train=7)	0.00	0.00	0.00	
Cnidaria (larvae) (n=2-train=3)	0.00	0.00	0.00	
Obelia spp. (medusa) (n=1-train=43)	0.05	1.00	0.10	
Polychaeta (larvae) (n=1-train=452)	0.00	0.00	0.00	0
Amphipoda (n=1-train=1)	0.00	0.00	0.00	
Tomopteris spp. (n=1-train=1)	0.00	0.00	0.00	
macro avg	0.33	0.37	0.28	
weighted avg	0.69	0.61	0.63	
		- 11	C4	

precision recall f1-score

Predictions of discarded taxa from training

	Acartia spp.	0.0%	9.4% (n=3)	14.3% (n=651)	4.4% (n=49)		80
	Aglantha spp. (medusa)	33.3% (n=2)	0.0%	0.0%	0.0%		
	Bivalvia (larvae)	0.0%	0.0%	0.0% (n=1)	7.1% (n=80)		70
	Calanus spp.	0.0%	0.0%	0.0% (n=2)	0.0%		
	Echinodermata (larvae)	0.0%	0.0%	0.4% (n=16)	1.1% (n=12)		60
	Evadne spp.	0.0%	0.0%	19.1% (n=871)	48.5% (n=545)		
g	Fritillaria spp.	$16.7\% \ (n=1)$	0.0%	0.4% (n=20)	0.8% (n=9)		50
Taxa	Gastropoda (larvae/Limacina)	0.0%	0.0%	0.0%	5.4% (n=61)		
Predicted	Harpacticoida- epibenthic	0.0%	0.0%	0.9% (n=43)	0.3% (n=3)		40
redi	Hydrozoa (medusa)	16.7% (n=1)	0.0%	0.0%	0.0%		
٩	Obelia spp. (medusa)	33.3% (n=2)	0.0%	0.0%	0.0%		30
	Oikopleura spp.	0.0%	0.0%	0.0%	0.4% (n=4)		
	Oithona spp.	0.0%	0.0%	13.2% (n=604)	2.8% (n=31)		20
	Podon/Pleopsis spp.	0.0%	0.0%	2.3% (n=103)	16.4% (n=184)		20
	Polychaeta (larvae)	0.0%	0.0%	5.1% (n=233)	8.9% (n=100)		10
	Pseudocalanus spp.	0.0%	81.2% (n=26)	18.6% (n=849)	1.2% (n=14)		10
	Temora spp.	0.0%	9.4% (n=3)	25.6% (n=1169)	2.8% (n=31)		0
		$Anthology hologopies Anthology hologopies h_{e_{\mathcal{C}}}$	$C_{alanoida}$ $C_{alanoida}$ $C_{alanoida}$ $C_{alanoida}$ C_{ala}	Copepoda (n≥4562 (unid)	≥ooplanktoi n≥1123 (unid)	" (unid)	0

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

