Use of SCN features: No

Max learning objects: 200 objects/class Strategy N° 4

Actual Values

Gulf Selected Samples prediction using Gulf training set, Learning with selected samples classes with no low regional training instances, with extra training categories, No Calanoida, Cyclopoida, Zooplankton classes in learning set

Confusion Matrix – In percent of Actual Value

Classification Report Matrix max 200 learning objects per class

precision recall f1-score

											Confu	usion Matr	tix – I	n per	cent c	of Ac	tual V	/alue													ning objects	•	
Acartia spp.	18%		-1%	-1%	31%	4%	5%	s <1%	% <1%	% 2%	<1%	<1%	5%	2%	<1%	<1%	2%	<1%	4%	<1%	1%	15%	<1%	<1%	2%	<1%	4%	Acartia spp	precis			f1-score	
Bivalvia (larvae)							% <1%						3%		<1%		<1%	,			<1%	15%	< 170	< 1/0	3/0	< 1/0	7/0	(n=18062-train=200 Bivalvia (larvae	0.93		0.18	0.31	
_			81%				% <1% % <1%		<1%				<1%		3%		< 1/0	1%			<1%							(n=7955-train=200 Copepoda (nauplii	0.90		0.90	0.92	
Copepoda (nauplii) Podon/Ploonsis spp													<1%			-10/	-10,					-10,	-10,		-10,		-19/	(n=2753-train=200	0.70		0.81	0.79	
Podon/Pleopsis spp.		6%			<1%				13%	< 1%	10%					<1%						<1%			<1%		<1%	(n=2715-train=200	0)	8	0.45	0.60	
Oithona spp.				<1%			6%		2 410		C0,		12%		2%			<1%	<1%			<1%					<1%	Oithona spp (n=2572-train=200	0.23	3	0.70	0.35	1.0
Calanoida (ci-ciii)				1%					% <1%			<1%	13%		5%				-10,		1%	204			-10,		-10	Calanoida (ci-ciii (n=1348-train=200	i) 0.29	9	0.38	0.33	
Pseudodiaptomus spp.					16%					<1%		-10						<1%			<1%				<1%		<1%	Pseudodiaptomus spp (n=1059-train=200	0.23	3	0.37	0.28	
Hydrozoa (medusa) Castropoda (larvae/Limasina)		2%		3%				3%		<1%			<1%		<1%						<1%	< 1%			< 1%	<1%	<1%	Hydrozoa (medusa (n=671-train=200		2	0.67	0.69	
Gastropoda (larvae/Limacina) Tomora con			9%			<1%	% 5 14%		54%		6% 5%	2%	<1% 5%		5%		7%	<1%				E0/	<1%	-10,	6%	4%	1%	Gastropoda (larvae/Limacina (n=629-train=200		8	0.54	0.37	
Temora spp	< 1/0				1%	9% 6 <1%			6%		57%	2%	3/0	0%	3%			<1%	U⁄0		<1%	J%	< 1/0				1/0	Temora spp (n=308-train=200). 0. 10	6	0.22	0.19	0.8
Bryozoa (larvae)	-10,							0,	<1%		2%	49%	2%		6%	-10/				<1%			-10,	<1%	<1%			Bryozoa (larvae (n=247-train=200	•	6	0.57	0.25	
Polychaeta (larvae) - Ascidiacea (larvae)		< 1/0	13/0	4/0	2%		<1%		< 170		<1%		1%		0%	<1%	6%	470			<1%		< 1/0	4%				Polychaeta (larvae	e) 0.38	8	0.49	0.43	
Harpacticoida- epibenthic			3%		12%		% 4%			1 %	4%	3170	54%		<1%		<1%	<1%	2%			2%			<1%			(n=237-train=200 Ascidiacea (larvae	2) 0.63		0.91	0.75	
Centropages spp.			J/0		39%					14%			2%	11%	1.0		1.0	170	5%	170		5%			2%			(n=194-train=200 Harpacticoida- epibenthic	C 0.03	٠.	0.54	0.06	0.6
Echinodermata (larvae)	ZJ/0			3%			% 3%			1 10	3%	3%	2'0		30%		19%	22%	J/0		3%	J/0			۷٬۰		3%	(n=108-train=200 Centropages spp). ••• • • • • • • • • • • • • • • • • •		0.54	0.00	
Obelia spp. (medusa)				J. 0	19%			i 10%) ₂		J. 0	J-10						5%			3.0	5%				,	5%	(n=44-train=200 Echinodermata (larvae))				
Evadne spp. (medusa)					150					6%	12%				6%	15.0	62%	6%				3.0			6%		J/0	(n=37-train=118 Obelia spp. (medusa	3) 0.03		0.30	0.05	
Cirripedia (larvae)			31%						6%		12.0	12%			25%		02-0	25%							0/0			(n=21-train=200	0.00		0.19	0.05	
Pseudocalanus spp.	29%		3170						0.0	43%		1270			23/0				14%						14%			Evadne spp (n=16-train=200	0.01	1	0.62	0.03	0.4
Decapoda-non brachyura (larvae)	23/0									15.0										50%				25%	1 1 0	2	25%	Cirripedia (larvae (n=16-train=200	0.01	1	0.25	0.03	
Fritillaria spp.												33%								30/0	67%			ZJ/0			.570	Pseudocalanus spp (n=7-train=200		0	0.14	0.00	
Eurytemora spp.										100%		33 0									0720							Decapoda-non brachyura (larvae (n=4-train=197		6	0.50	0.10	
Decapoda-brachyura (zoeae)										1000																1	00%	Fritillaria spp (n=3-train=200	0. 0.01	1	0.67	0.01	0.2
Osteichthyes (larvae)																											00%	Eurytemora spp (n=1-train=200	0.00 ()	0	0.00	0.00	0.2
Paracalanus spp.																									100%		J O - 0	Decapoda-brachyura (zoeae (n=1-train=200	e) 0.00	0	0.00	0.00	
	Aca	Bir	Con	Por	Oiz	, Co,	, S	1/4	Ca) Pen	Bru	Pol So	1/20	Cen	Ç.	Obs	€L ₂	Cira	QSR.	O _e s	Arix.	Cur	O _e s			Car ·	Lah. Por	Ostoichthuas (Jarvaa	e) 0.00	0	0.00	0.00	
	Acartia,	Spp.	Copepo (larvae)	Podon Podon	On Pleopsis	Hona Calar	Panoida (ci	'Idodiap,	tomis Sp.	Topoda (Spp.	Polychaeta (lat.	idiacea (lana)	Centrop Colda	odges "Ino	derma	Large)	Spp	Pselido (lange)	ocalan.	Ida na	Suryroll	Decapo	Osteich, o. Osteichige	hthye de	Calanus Sp.	Spp. Spp.	(n=1-train=43) Paracalanus spp (n=1-train=82)).	0	1.00	0.00	
			, rae) All	Olii) Psis		, ,	City Of	MIS SPA	1150) (10)	racli:	Vae, (la,	rap/an	de) (Diber Spp.	? "	(lander)	TUSA	"ONO	res s	100 to	Tach,	5/10	ach	yura la	ander Sp.	v. %)	Calanus spp	')).		_	_	0.0
									Λ,	Stropoda (la)	MAC	inal			Thic	,	·%					YUTA	Decapo	Osteicht, o. Osteicht,	(done	300)		(n=0-train=109 Labidocera spp)) ɔ .		_	_	
																							80)					extra (n=0-train=200) Tortanus spp)) o.				
													Predic	icted Vá	alues													classes $(n=0-train=111)$			-	- 0.25	
																												macro avg (corr)		_	0.44	0.25	
																												weighted avg	g 0.82	2	0.46	0.50	

Extra training classes

Predictions of discarded taxa from training 100 0.0% Acartia spp. 0.8% (n=61) 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% Ascidiacea (larvae) 0.2% (n=12) 15.4% (n=2) 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.2% (n=4) 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 33.5% (n=611) Bivalvia (larvae) 0.1% (n=4) 0.0% Bryozoa (larvae) 5.4% (n=414) 0.0% 0.0% 13.0% (n=3) 0.0% 0.0% 0.0% 0.0% 17.8% (n=325) 0.0% 0.0% 0.0% 0.0% Calanoida (ci-ciii) 32.3% (n=2487) 42.9% (n=3) 8.7% (n=2) 0.0% 2.1% (n=39) 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 80 Calanus spp. 0.0% (n=1) 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% Centropages spp. 0.0% (n=1) 50.0% (n=1) Cirripedia (larvae) 2.0% (n=157) 0.0% 28.6% (n=2) 0.0% 0.0% 0.0% 0.0% 0.0% 1.6% (n=30) 0.0% 0.0% 0.0% 0.0% 28.6% (n=2) 8.7% (n=2) 0.0% Copepoda (nauplii) 3.4% (n=265) 17.6% (n=321) 0.0% 0.0% 0.0% 0.0% 0.0% Decapoda-brachyura (zoeae) 0.0% (n=2) 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% Echinodermata (larvae) 5.4% (n=416) 4.3% (n=1) 1.5% (n=28) Таха 60 Eurytemora spp. 0.9% (n=68) 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.8% (n=14) Evadne spp. 6.0% (n=459) 0.0% 0.0% 0.0% 0.0% 0.0% Predicted Fritillaria spp. 2.6% (n=204) 15.4% (n=2) 0.0% 0.0% 0.0% 0.0% 100.0% (n=2) 0.0% 0.5% (n=9) Gastropoda (larvae/Limacina) 0.6% (n=46) 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 4.3% (n=1) 12.1% (n=220) Harpacticoida – epibenthic 11.3% (n=870) 0.0% 0.0% 60.9% (n=14) 0.0% 0.0% 0.0% 0.0% 0.4% (n=7) 40 0.0% 3.1% (n=57) Hydrozoa (medusa) 0.2% (n=18) 0.0% 0.0% 0.0% 0.0% 0.0% 100.0% (n=1) 0.0% 0.0% Obelia spp. (medusa) 0.2% (n=14) 7.7% (n=1) 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.4% (n=8) Oithona spp. 13.8% (n=1066) 7.7% (n=1) Osteichthyes (larvae) 0.0% (n=1) 0.0% 0.0% 0.0% 50.0% (n=1) 0.0% 0.0% 0.0% 53.8% (n=7) 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% Paracalanus spp. 0.4% (n=31) 0.0% 0.1% (n=1) 0.0% 0.0% 0.0% 0.0% 0.0% Podon/Pleopsis spp. 0.9% (n=68) 0.0% 0.0% 5.7% (n=104) 20 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% Polychaeta (larvae) 0.5% (n=41) 2.2% (n=40) 0.0% 0.0% 0.0% Pseudocalanus spp. 0.1% (n=9) 0.0% 0.0% 0.0% 0.0% 0.1% (n=1) Pseudodiaptomus spp. 12.4% (n=960) 0.0% 0.0% 0.0% 100.0% (n=1) 0.0% 0.0% 0.0% 0.1% (n=2) 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.1% (n=1) Temora spp. 0.3% (n=21) 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% Tortanus spp. 0.2% (n=15) 0 Microsetella spp. Zooplankton (unid) Chaetognatha Cnidaria (larvae) Cyclopoida (unid) Oikopleura spp. Calanoida (unid) Monstrillidae Ostracoda

Relative Abundance of Top Taxonomic Instances per Sample



