

Use of SCN features: Yes
Max learning objects: 5000 objects/class
Strategy N° 7

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

Confusion Matrix – In percent of Actual Value

Classification Report Matrix
max 5000 learning objects per class

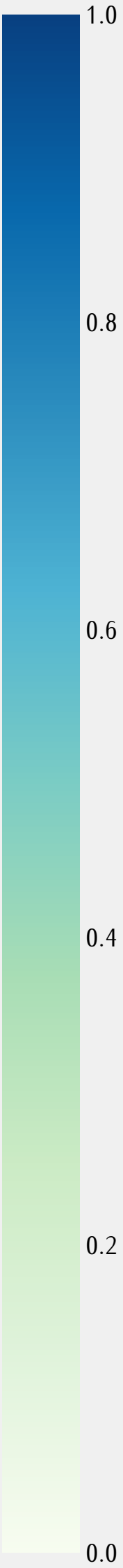
Actual Values

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|-----|------|------|----|------|------|
| Acartia spp. | 36% | | <1% | <1% | 32% | 7% | 4% | <1% | | 1% | <1% | <1% | <1% | <1% | 2% | <1% | <1% | 2% | <1% | | <1% | <1% | <1% | 6% | | <1% | 6% |
| Bivalvia (larvae) | | 93% | <1% | <1% | <1% | <1% | <1% | <1% | 4% | | <1% | <1% | <1% | <1% | | <1% | | <1% | <1% | | | | <1% | | | | |
| Copepoda (nauplii) | | 2% | 92% | 1% | <1% | <1% | <1% | | <1% | | <1% | <1% | | | 2% | | | | 1% | | | | <1% | <1% | | | |
| Podon/Pleopsis spp. | | 4% | 14% | 63% | <1% | <1% | <1% | 1% | 11% | <1% | 3% | <1% | | | | <1% | <1% | 1% | | | <1% | | <1% | <1% | | <1% | <1% |
| Oithona spp. | <1% | | <1% | <1% | 81% | 3% | 5% | | | | <1% | <1% | | 3% | 2% | | <1% | 1% | | | | <1% | <1% | <1% | | | |
| Calanoida (ci-ciii) | <1% | | 3% | 4% | 16% | 30% | 15% | | <1% | | 4% | 1% | | 4% | | 4% | | 11% | 6% | | | 1% | <1% | <1% | | | |
| Pseudodiaptomus spp. | <1% | | 1% | <1% | 20% | 4% | 58% | | <1% | <1% | <1% | <1% | | 1% | <1% | <1% | | 3% | 3% | | <1% | | <1% | 3% | | | 1% |
| Hydrozoa (medusa) | <1% | 3% | | 6% | 1% | <1% | | 70% | 6% | <1% | <1% | <1% | | | | <1% | 1% | 6% | <1% | | <1% | | 1% | | | | |
| Gastropoda (larvae/Limacina) | | 13% | 7% | 10% | <1% | <1% | <1% | 1% | 66% | | <1% | <1% | | | | | | <1% | <1% | | | | | | | | |
| Temora spp. | <1% | | 2% | <1% | 4% | 6% | 19% | | <1% | 24% | <1% | 2% | | <1% | 4% | <1% | | 10% | 5% | | 11% | | | 7% | | | 2% |
| Bryozoa (larvae) | | 1% | 25% | 18% | <1% | <1% | | | 8% | | 45% | 2% | | | | | | | <1% | | | | <1% | | | | |
| Polychaeta (larvae) | <1% | | 22% | 6% | <1% | <1% | 2% | | 1% | <1% | <1% | 42% | | <1% | | 3% | | 5% | 12% | | | <1% | | <1% | | <1% | <1% |
| Ascidacea (larvae) | <1% | | | | 4% | | <1% | | | | 2% | 91% | | | | | | | | | <1% | <1% | 2% | | | | |
| Harpacticoida- epibenthic | <1% | | 5% | | 36% | 9% | 12% | | | | <1% | <1% | | 20% | | 3% | | <1% | <1% | | 2% | | 3% | | 3% | | 3% |
| Centropages spp. | 23% | | | | 41% | 5% | | | | 9% | | | | | 14% | | | | | | | | | 5% | | | 5% |
| Echinodermata (larvae) | | | 8% | 11% | | 3% | 3% | | | | | | | | | 30% | | 16% | 30% | | | | | | | | |
| Obelia spp. (medusa) | | | | 5% | 14% | 5% | 5% | 10% | | | | | | | | | 33% | 19% | 5% | | | | | 5% | | | |
| Evadne spp. | | | | | | 6% | | 6% | | | | | | | | | | 69% | 19% | | | | | | | | |
| Cirripedia (larvae) | | | 44% | | | | | | 6% | | 6% | | | | | 6% | | | 38% | | | | | | | | |
| Chaetognatha | | | | | | | | | | | | 8% | | | | | | | | | | | 31% | 62% | | | |
| Pseudocalanus spp. | 29% | | | | | | 14% | | | 29% | | | | | | | | | | 29% | | | | | | | |
| Decapoda-non brachyura (larvae) | | | | | | | | | | | | | | | | | | | | | 100% | | | | | | |
| Fritillaria spp. | | | | | | | | | | | | | | | | | | | | | | | 67% | 33% | | | |
| Oikopleura spp. | | | | | | | | | | | | | | | | | | | | | | | 100% | | | | |
| Paracalanus spp. | | | | | | | | | | | | | | | | | | | | | | | | | | | 100% |
| Osteichthyes (larvae) | | | | | | | | | | | | | | | | | | | | | | | | 100% | | | |
| Decapoda-brachyura (zoeae) | | | | | | | | | | | | | | | | | | | | | | | | | | 100% | |
| Eurytemora spp. | | | | | | | | | | | | | | | | | | | | 100% | | | | | | | |
| Acartia spp. | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bivalvia (larvae) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Copepoda (nauplii) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Podon/Pleopsis spp. | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Oithona spp. | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Calanoida (ci-ciii) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pseudodiaptomus spp. | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hydrozoa (medusa) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Gastropoda (larvae/Limacina) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Temora spp. | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bryozoa (larvae) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Polychaeta (larvae) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ascidacea (larvae) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Harpacticoida- epibenthic | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Centropages spp. | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Echinodermata (larvae) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Obelia spp. (medusa) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Evadne spp. | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cirripedia (larvae) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chaetognatha | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pseudocalanus spp. | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Decapoda-non brachyura (larvae) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fritillaria spp. | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Oikopleura spp. | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Paracalanus spp. | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Osteichthyes (larvae) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Decapoda-brachyura (zoeae) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Eurytemora spp. | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Predicted Values

Predicted Values

| | precision | recall | f1–score |
|--|-----------|--------|----------|
| Acartia spp. (n=18062–train=5000) | 0.99 | 0.36 | 0.53 |
| Bivalvia (larvae) (n=7955–train=3764) | 0.97 | 0.93 | 0.95 |
| Copepoda (nauplii) (n=2753–train=5000) | 0.77 | 0.92 | 0.84 |
| Podon/Pleopsis spp. (n=2715–train=5000) | 0.84 | 0.63 | 0.72 |
| Oithona spp. (n=2572–train=5000) | 0.25 | 0.81 | 0.38 |
| Calanoida (ci–cii) (n=1348–train=5000) | 0.22 | 0.30 | 0.25 |
| Pseudodiaptomus spp. (n=1059–train=2113) | 0.34 | 0.58 | 0.43 |
| Hydrozoa (medusa) (n=671–train=4052) | 0.86 | 0.70 | 0.78 |
| Gastropoda (larvae/Limacina) (n=629–train=3272) | 0.38 | 0.66 | 0.48 |
| Temora spp. (n=308–train=5000) | 0.25 | 0.24 | 0.25 |
| Bryozoa (larvae) (n=247–train=1142) | 0.33 | 0.45 | 0.38 |
| Polychaeta (larvae) (n=237–train=1577) | 0.54 | 0.42 | 0.47 |
| Ascidacea (larvae) (n=194–train=861) | 0.97 | 0.91 | 0.94 |
| Harpacticoida– epibenthic (n=108–train=555) | 0.07 | 0.20 | 0.11 |
| Centropages spp. (n=44–train=3620) | 0.02 | 0.14 | 0.04 |
| Echinodermata (larvae) (n=37–train=3043) | 0.03 | 0.30 | 0.06 |
| Obelia spp. (medusa) (n=21–train=1003) | 0.24 | 0.33 | 0.28 |
| Evadne spp. (n=16–train=5000) | 0.02 | 0.69 | 0.03 |
| Cirripedia (larvae) (n=16–train=5000) | 0.01 | 0.38 | 0.03 |
| Chaetognatha (n=13–train=89) | 0.00 | 0.00 | 0.00 |
| Pseudocalanus spp. (n=7–train=4845) | 0.01 | 0.29 | 0.02 |
| Decapoda–non brachyura (larvae) (n=4–train=423) | 0.44 | 1.00 | 0.62 |
| Fritillaria spp. (n=3–train=5000) | 0.02 | 0.67 | 0.03 |
| Oikopleura spp. (n=2–train=5000) | 0.00 | 0.00 | 0.00 |
| Paracalanus spp. (n=1–train=1619) | 0.00 | 0.00 | 0.00 |
| Osteichthyes (larvae) (n=1–train=45) | 0.00 | 0.00 | 0.00 |
| Decapoda–brachyura (zoeae) (n=1–train=628) | 0.07 | 1.00 | 0.12 |
| Eurytemora spp. (n=1–train=1818) | 0.00 | 0.00 | 0.00 |
| macro avg | 0.31 | 0.46 | 0.31 |
| weighted avg | 0.84 | 0.58 | 0.63 |
| | precision | recall | f1–score |



Relative Abundance of Top Taxonomic Instances per Sample

