

Use of SCN features: No
Max learning objects: 200 objects/class
Strategy N° 1

NL 2021 Selected Samples prediction using NL 2021 training set,
Learning with all classes present in the selected samples, no extra training categories,
No Calanoida (ci-vi), Cyclopoida, Zooplankton classes in learning set

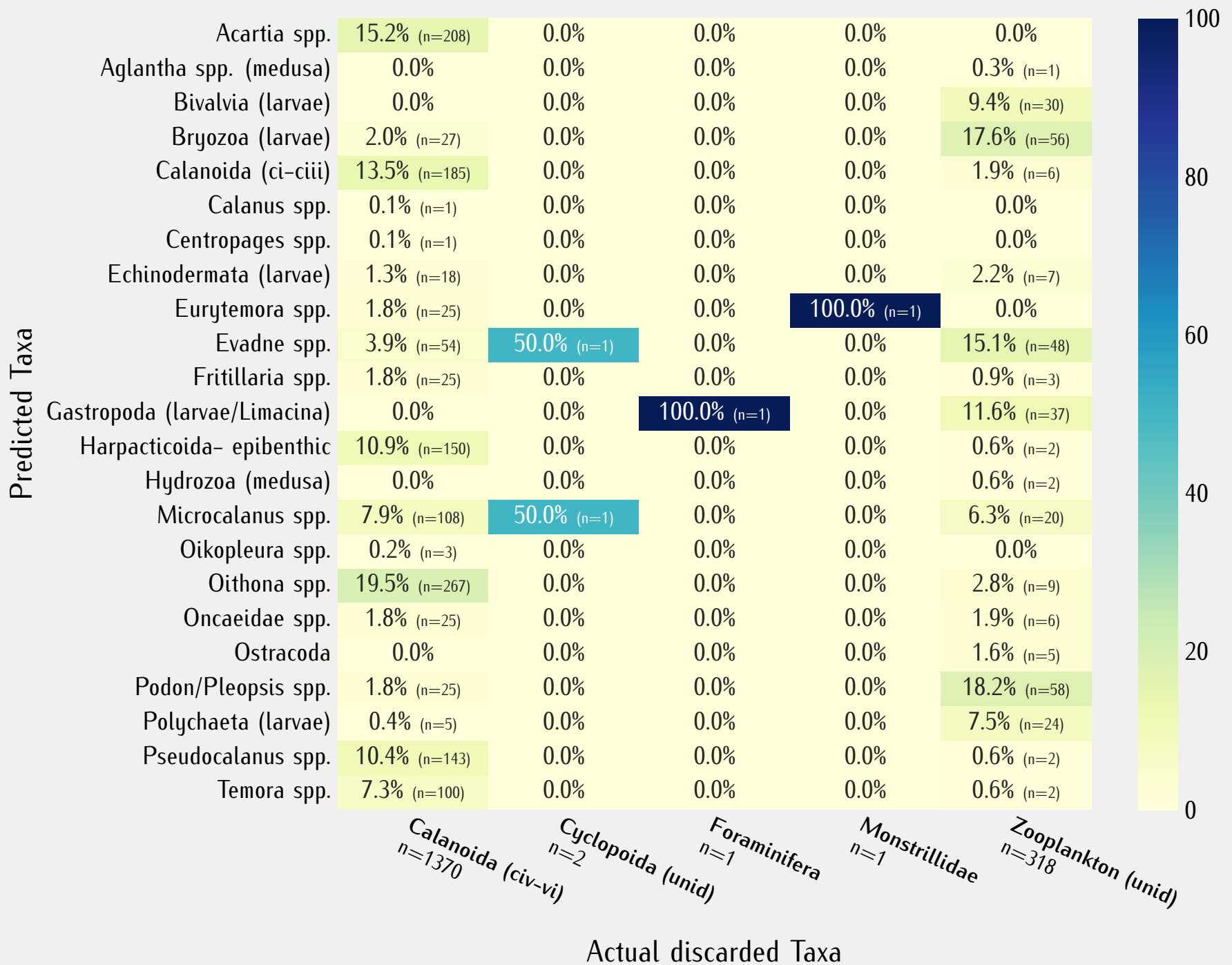
Confusion Matrix - In percent of Actual Value

| Actual Values | Predicted Values | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------|------------------|-------------|-------------|--------------------|--------------|------------------|---------------------|---------------------|-----------------|------------------|------------------------|---------------------------|-------------------|------------------------------|-------------------|------------------|-------------------|--------------|---------------------|--------------|-----------------|------------------------|----------------|----------------------|-----------|---------------|---------------------------------|-----|
| | Acartia spp. | Evadne spp. | Temora spp. | Pseudocalanus spp. | Oithona spp. | Bryozoa (larvae) | Podon/Pleopsis spp. | Calanoida (ci-ciii) | Oikopleura spp. | Centropages spp. | Echinodermata (larvae) | Harpacticoida- epibenthic | Hydrozoa (medusa) | Gastropoda (larvae/Limacina) | Bivalvia (larvae) | Fritillaria spp. | Microcalanus spp. | Chaetognatha | Polychaeta (larvae) | Calanus spp. | Eurytemora spp. | Aglantha spp. (medusa) | Oncaeidae spp. | Sarsia spp. (medusa) | Ostracoda | Tortanus spp. | Decapoda-non brachyura (larvae) | |
| Acartia spp. | 50% | <1% | 8% | 14% | 5% | <1% | <1% | 4% | <1% | <1% | <1% | 11% | | | | 1% | 3% | | <1% | | 2% | <1% | <1% | | | | | |
| Evadne spp. | | 81% | <1% | <1% | <1% | 7% | 6% | <1% | | | <1% | | <1% | 2% | <1% | <1% | <1% | | <1% | | | | | | | <1% | | |
| Temora spp. | 12% | 1% | 42% | 9% | 8% | <1% | 1% | 13% | | <1% | <1% | 5% | | | | <1% | 4% | | <1% | | 3% | <1% | <1% | | | | | |
| Pseudocalanus spp. | 19% | | 12% | 44% | <1% | | <1% | 5% | | <1% | <1% | 5% | | | | <1% | 5% | | <1% | <1% | 7% | | <1% | | | | | |
| Oithona spp. | 8% | <1% | <1% | <1% | 82% | <1% | | <1% | | | 1% | <1% | | | | 3% | | | | | <1% | | <1% | | | | | |
| Bryozoa (larvae) | | 6% | | | | 88% | 3% | | | | <1% | | | 1% | | <1% | <1% | | | | | | | | | | | |
| Podon/Pleopsis spp. | | 8% | 10% | <1% | <1% | 5% | 29% | 3% | <1% | <1% | | <1% | | | | | 23% | | 19% | | <1% | <1% | | | | | | |
| Calanoida (ci-ciii) | 10% | 12% | 5% | 5% | 7% | 2% | 10% | 10% | | | 2% | 2% | | | | | 28% | | | 2% | 3% | | <1% | | | | | |
| Oikopleura spp. | | | <1% | 3% | 3% | <1% | | <1% | 68% | | | <1% | | | | 10% | | 9% | <1% | 3% | | | | | | | | <1% |
| Centropages spp. | 17% | | 3% | 1% | | | | | 1% | 68% | | | | | | | | | | | 8% | | | | | | | 1% |
| Echinodermata (larvae) | 6% | | | | 22% | | 2% | | 4% | | 28% | | 2% | | | 32% | | | 4% | | | | | | | | | |
| Harpacticoida- epibenthic | 4% | | 4% | | 9% | | | 6% | | | | 68% | | | | | 2% | | | | | | | 6% | | | | |
| Hydrozoa (medusa) | | 9% | | | | 9% | 9% | | | | 2% | | 11% | 2% | 2% | 17% | 4% | | 13% | 4% | | 17% | | 2% | | | | |
| Gastropoda (larvae/Limacina) | | 6% | | | | | 11% | | | | | | | 64% | 11% | | | | 2% | | | 4% | | | | 2% | | |
| Bivalvia (larvae) | | | | | | 5% | 2% | | | | | | | | 16% | 77% | | | | | | | | | | | | |
| Fritillaria spp. | | | | | 12% | | | | 9% | | 9% | | | | | | 68% | | | | | | | 3% | | | | |
| Microcalanus spp. | | 3% | | 3% | | | 6% | 13% | | | | 6% | | | | | | 58% | | 10% | | | | | | | | |
| Chaetognatha | | | | | | | | | 21% | | | | | | | | | | 71% | | 4% | | | 4% | | | | |
| Polychaeta (larvae) | 5% | 10% | | | 10% | | 15% | 5% | | | | | 5% | | | | 10% | | 35% | | | | | | | | 5% | |
| Calanus spp. | | | | | | | | | | 7% | | | | | | | | | | | 93% | | | | | | | |
| Eurytemora spp. | 20% | | 10% | 20% | | | | | | | | 30% | | | | | | | | | | 20% | | | | | | |
| Aglantha spp. (medusa) | | | | | | | | | 11% | | | | | | | | | | | | | | 78% | | 11% | | | |
| Oncaeidae spp. | | | | | | | 17% | | | | | 67% | | | | | | | | | | | | 17% | | | | |
| Sarsia spp. (medusa) | | | | | | | | | | | | | | | | | | | 50% | | 25% | | | 25% | | | | |
| Ostracoda | | | | | | 100% | | | | | | | | | | | | | | | | | | | | | | |
| Tortanus spp. | 50% | | | | | | | | | | | | | | | | | | | | | | | | | | 50% | |
| Decapoda-non brachyura (larvae) | | | | | | | | | | | | | | | | | | | | 100% | | | | | | | | |

Classification Report Matrix
max 200 learning objects per class

| | precision | recall | f1-score |
|--|-----------|--------|----------|
| Acartia spp. (n=2490-train=200) | 0.74 | 0.50 | 0.59 |
| Evadne spp. (n=1931-train=200) | 0.94 | 0.81 | 0.87 |
| Temora spp. (n=1416-train=200) | 0.61 | 0.42 | 0.50 |
| Pseudocalanus spp. (n=1044-train=200) | 0.48 | 0.44 | 0.46 |
| Oithona spp. (n=345-train=200) | 0.50 | 0.82 | 0.62 |
| Bryozoa (larvae) (n=248-train=119) | 0.56 | 0.88 | 0.69 |
| Podon/Pleopsis spp. (n=230-train=200) | 0.28 | 0.29 | 0.29 |
| Calanoida (ci-ciüi) (n=130-train=200) | 0.03 | 0.10 | 0.05 |
| Oikopleura spp. (n=115-train=200) | 0.84 | 0.68 | 0.75 |
| Centropages spp. (n=88-train=40) | 0.87 | 0.68 | 0.76 |
| Echinodermata (larvae) (n=50-train=200) | 0.27 | 0.28 | 0.27 |
| Harpacticoida- epibenthic (n=47-train=136) | 0.07 | 0.68 | 0.13 |
| Hydrozoa (medusa) (n=47-train=21) | 0.62 | 0.11 | 0.18 |
| Gastropoda (larvae/Limacina) (n=47-train=110) | 0.42 | 0.64 | 0.50 |
| Bivalvia (larvae) (n=44-train=71) | 0.68 | 0.77 | 0.72 |
| Fritillaria spp. (n=34-train=200) | 0.21 | 0.68 | 0.33 |
| Microcalanus spp. (n=31-train=80) | 0.06 | 0.58 | 0.10 |
| Chaetognatha (n=28-train=67) | 0.67 | 0.71 | 0.69 |
| Polychaeta (larvae) (n=20-train=200) | 0.09 | 0.35 | 0.14 |
| Calanus spp. (n=14-train=200) | 0.48 | 0.93 | 0.63 |
| Eurytemora spp. (n=10-train=88) | 0.01 | 0.20 | 0.02 |
| Aglantha spp. (medusa) (n=9-train=21) | 0.33 | 0.78 | 0.47 |
| Oncaeidae spp. (n=6-train=16) | 0.03 | 0.17 | 0.04 |
| Sarsia spp. (medusa) (n=4-train=4) | 0.33 | 0.25 | 0.29 |
| Ostracoda (n=2-train=6) | 0.00 | 0.00 | 0.00 |
| Tortanus spp. (n=2-train=4) | 0.33 | 0.50 | 0.40 |
| Decapoda-non brachyura (larvae) (n=1-train=7) | 0.00 | 0.00 | 0.00 |
| macro avg | 0.39 | 0.49 | 0.39 |
| weighted avg | 0.68 | 0.57 | 0.60 |
| | precision | recall | f1-score |

Predictions of discarded taxa from training



Relative Abundance of Top Taxonomic Instances per Sample

