Supplementary materials for:

Metagenomic Biodiversity Assessment of an Offshore Wind Farm

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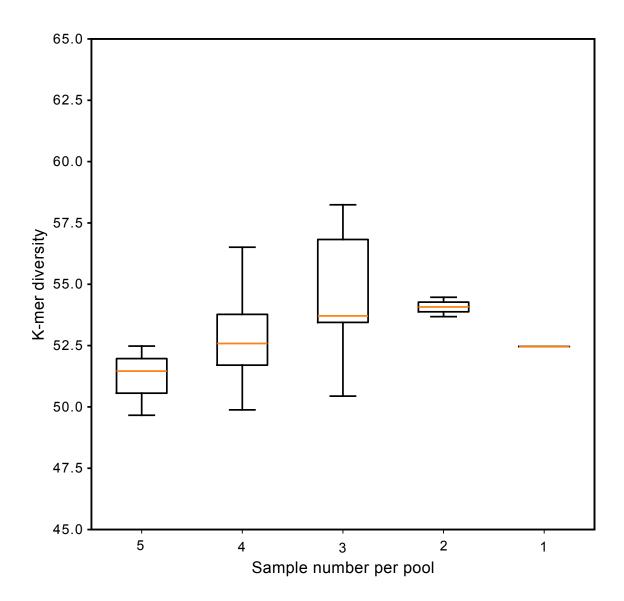


Fig. S1. Effect of sample number per pool on diversity metrics. No significant differences were observed between pools containing different numbers of input seawater samples (values represent mean \pm SD; Student's t-test).

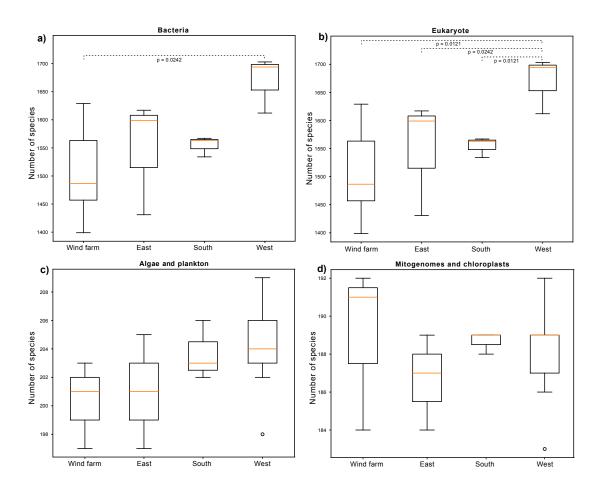


Fig. S2. Number of species detected (after quality filtering), grouped by bacteria (a), eukaryote (b), algae and plankton (c), and mitochondria (d) datasets (values represent mean \pm SD; Student's t-test).

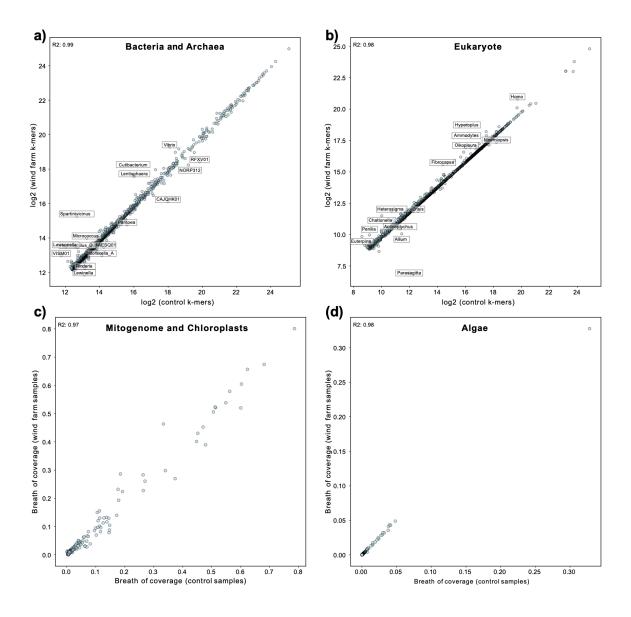


Fig. S3. Correlation of DNA abundance between control and wind farm samples for all detected species. The x-axis shows the number of identified kmers for a species, summed over all control samples and normalized for read numbers. The y-axis shows the corresponding kmer counts in wind farm samples, also normalized. Each point represents a species, grouped into Bacteria/Archaea (a), Eukaryotes (b), mitochondrial genomes (c), and algal genomes (d). Species with significantly different abundances between control and wind farm samples are labelled.

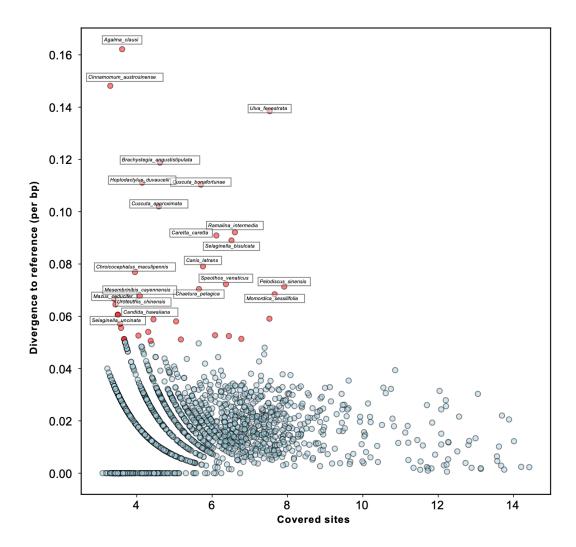


Fig. S4. Sequence divergence of each species relative to the reference genomes, based on alignments against the mitochondrial and chloroplast reference databases. Species exhibiting greater than 5% divergence were considered likely false positives and excluded from downstream analyses.

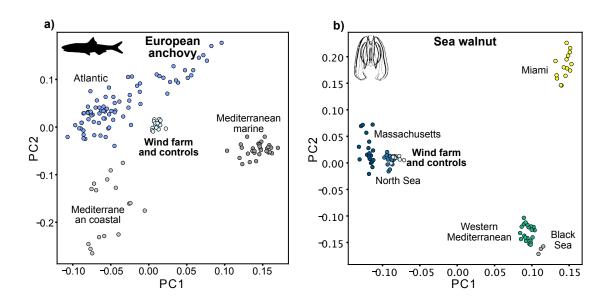


Fig. S5. Principal component analysis (PCA) comparing eDNA sequences of (a) European anchovy and (b) sea walnut to previously sequenced genomes.