

ELECTRONIC SUPPLEMENTARY MATERIALS

Assessing introduction risk using species' rank-abundance distributions

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Number of tables: 1

Number of figures: 8

26 **Supplementary Figure Legends**

27 Fig. S1. Rank-abundance distributions (left panels) and corresponding colonization pressure:total
28 propagule pressure curves (CP:total PP; right panels) highlighting changes in the structure
29 of invertebrate assemblages in unexchanged ballast water of ships during trans-Atlantic
30 voyages. The five lines on each graph depict rank-abundance distributions of CP:total PP
31 relationships on five different days. Colour scheme for different days of the voyages
32 applies to the entire figure. Also shown in each left panel are total PP (solid bar) and mean
33 PP (\pm S.E.M; hatched bar) recorded at the last time point. Numeric values and circles in
34 each right panel indicate observed total PP and estimated asymptotic species richness
35 (Chao-1). Circles are offset when values overlap.

36 Fig. S2. Rank-abundance distributions (left panels) and corresponding CP:total PP curves (right
37 panels) showing changes in the structure of invertebrate assemblages in unexchanged
38 ballast water of ships during trans-Pacific voyages. Descriptions of symbols used are given
39 in figure S1.

40 Fig. S3. Rank-abundance distributions (left panels) and corresponding CP:total PP curves (right
41 panels) illustrating changes in the structure of diatom assemblages in unexchanged ballast
42 water of ships during trans-Atlantic (a-f) and trans-Pacific (g-h) voyages. Descriptions of
43 symbols used are given in figure S1.

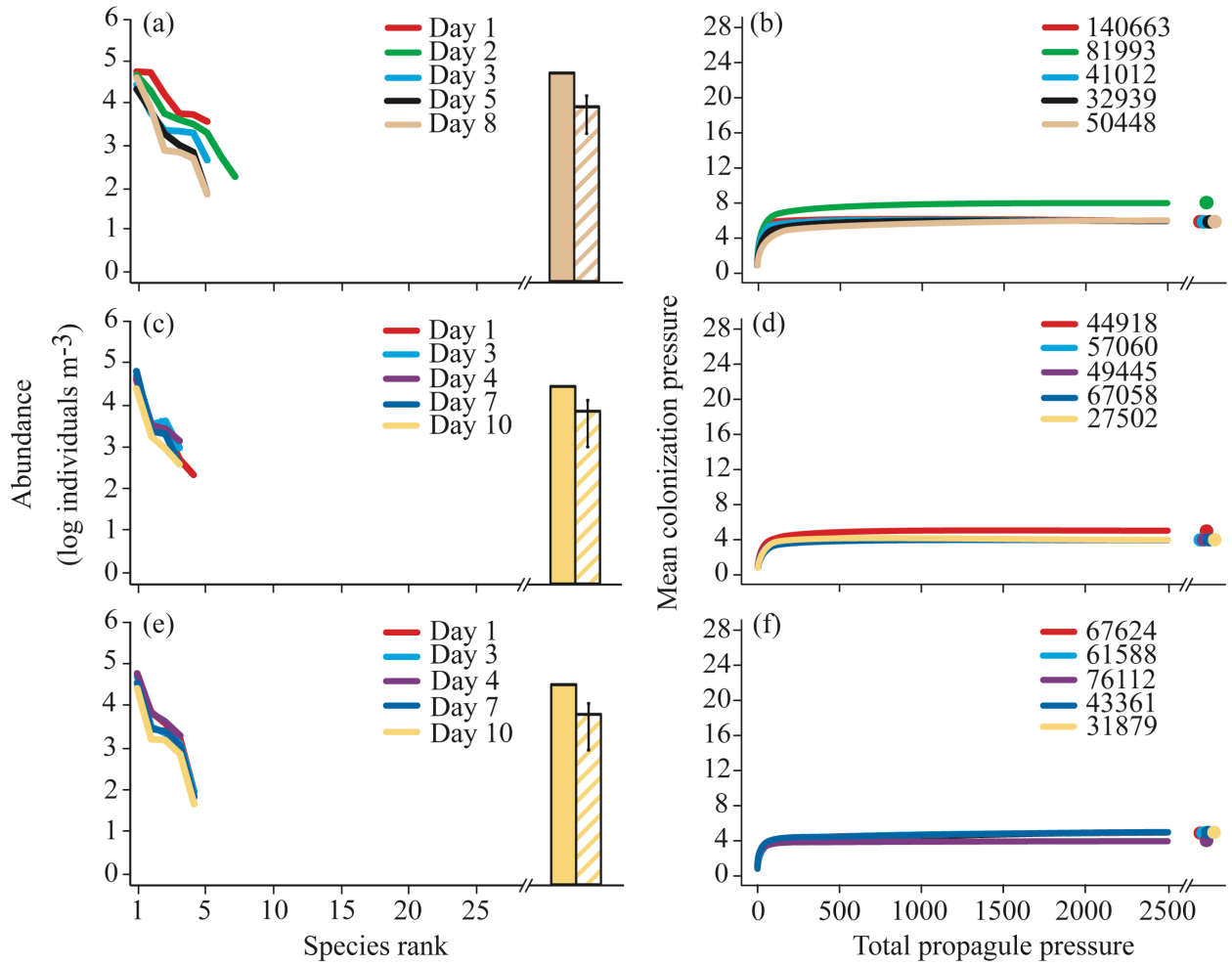
44 Fig. S4. Rank-abundance distributions (left panels) and corresponding CP:total PP curves (right
45 panels) demonstrating changes in the structure of dinoflagellate assemblages in
46 unexchanged ballast water of ships during trans-Atlantic voyages. Descriptions of symbols
47 used are given in figure S1.

48 Fig. S5. Rank-abundance distributions (left panels) and corresponding CP:total PP curves (right
49 panels) highlighting changes in the structure of invertebrate assemblages in ships' ballast
50 water before and after ballast water exchange during trans-Atlantic voyages. Descriptions of
51 symbols used are given in figure S1.

52 Fig. S6. Rank-abundance distributions (left panels) and corresponding CP:total PP curves (right
53 panels) illustrating changes in the structure of invertebrate assemblages in ships' ballast
54 water before and after ballast water exchange during trans-Pacific voyages. Descriptions of
55 symbols used are given in figure S1.

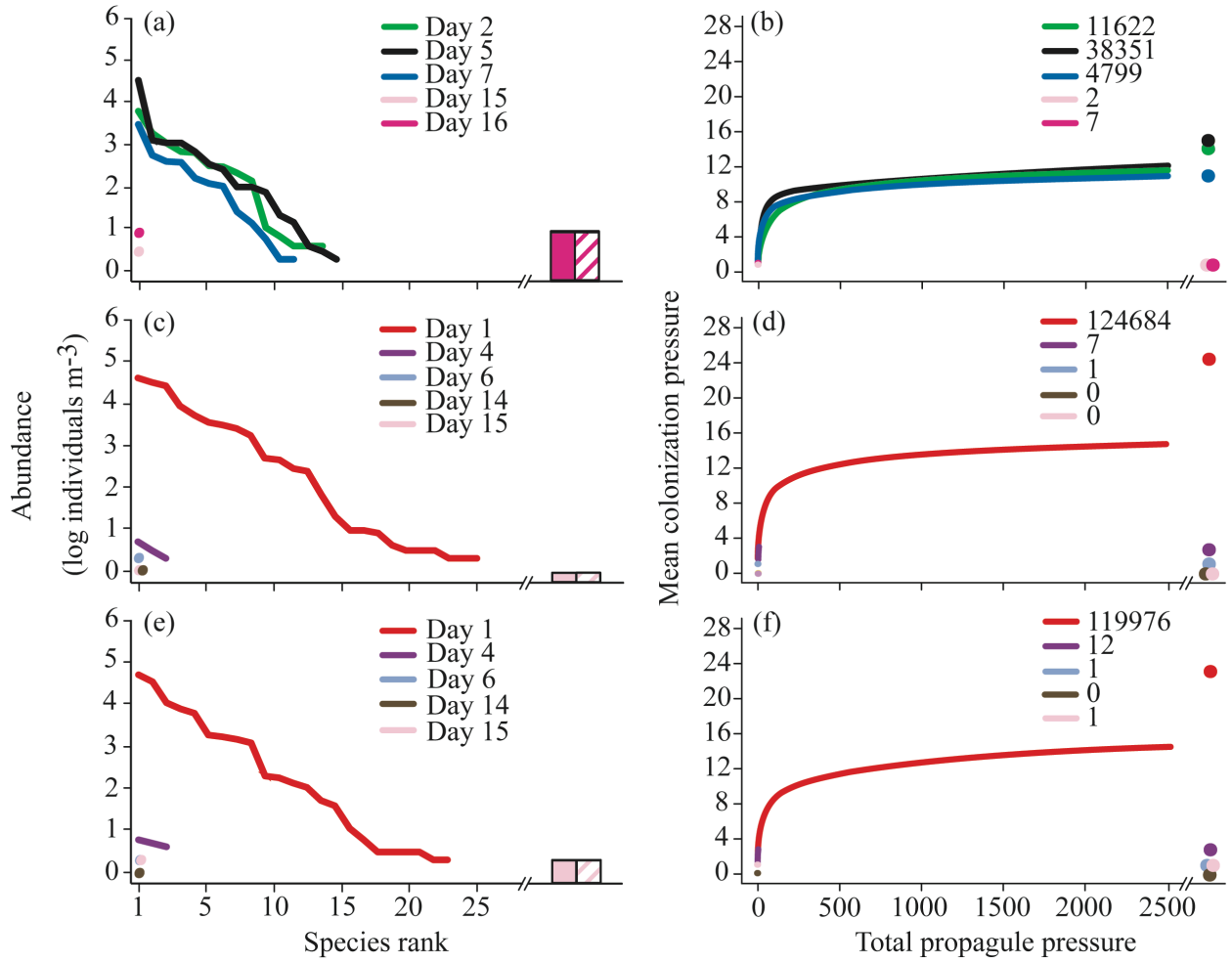
56 Fig. S7. Rank-abundance distributions (left panels) and corresponding CP:total PP curves (right
57 panels) demonstrating changes in the structure of diatom assemblages in ships' ballast water
58 before and after ballast water exchange trans-Atlantic (a-d) and trans-Pacific (e-f) voyages.
59 Descriptions of symbols used are given in figure S1.

60 Fig. S8. Rank-abundance distributions (left panels) and corresponding CP:total PP curves (right
61 panels) showing changes in the structure of diatom assemblages in ships' ballast water
62 before and after ballast water exchange trans-Atlantic voyages. Descriptions of symbols
63 used are given in figure S1.



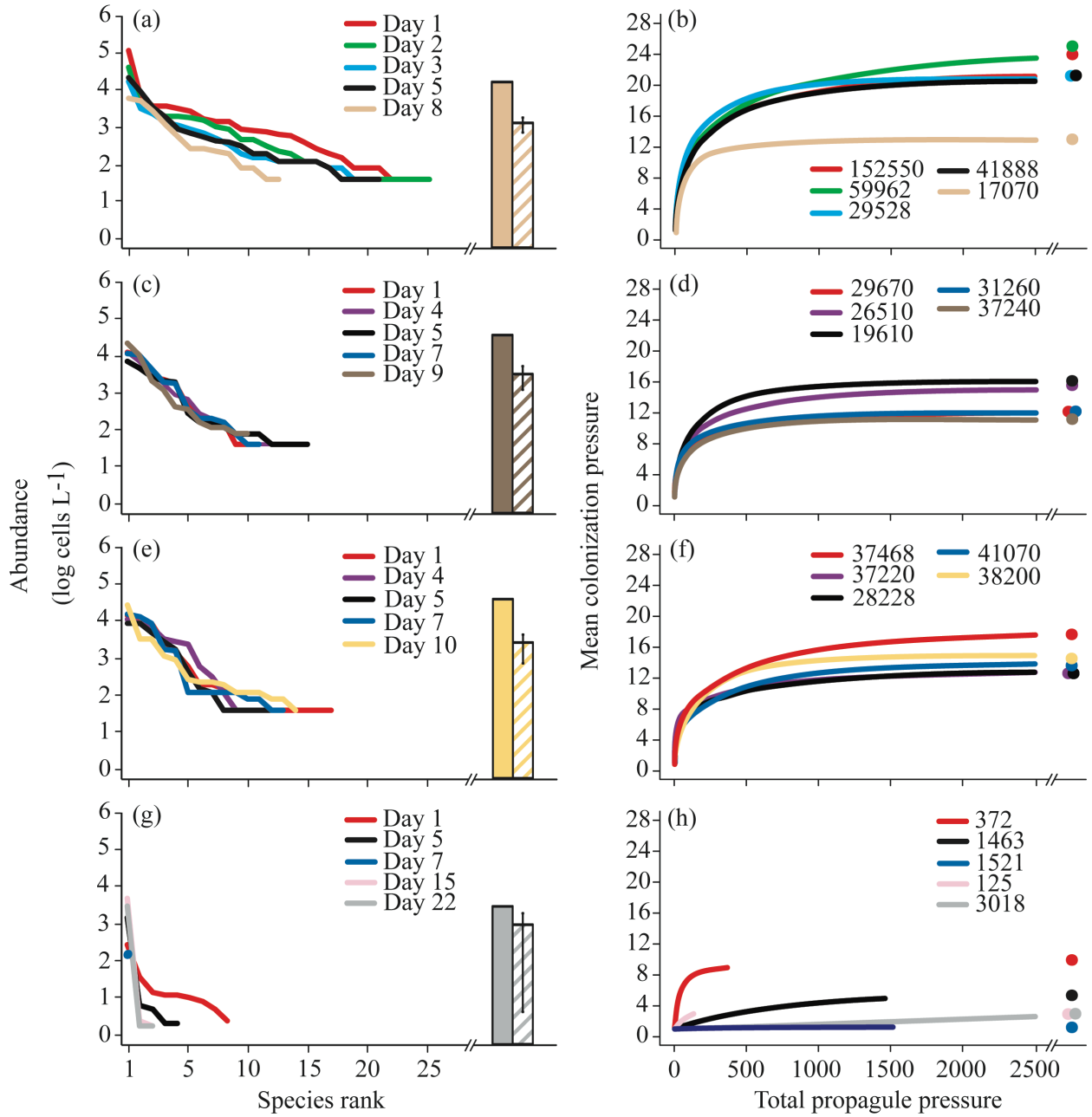
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65 Figure S1.



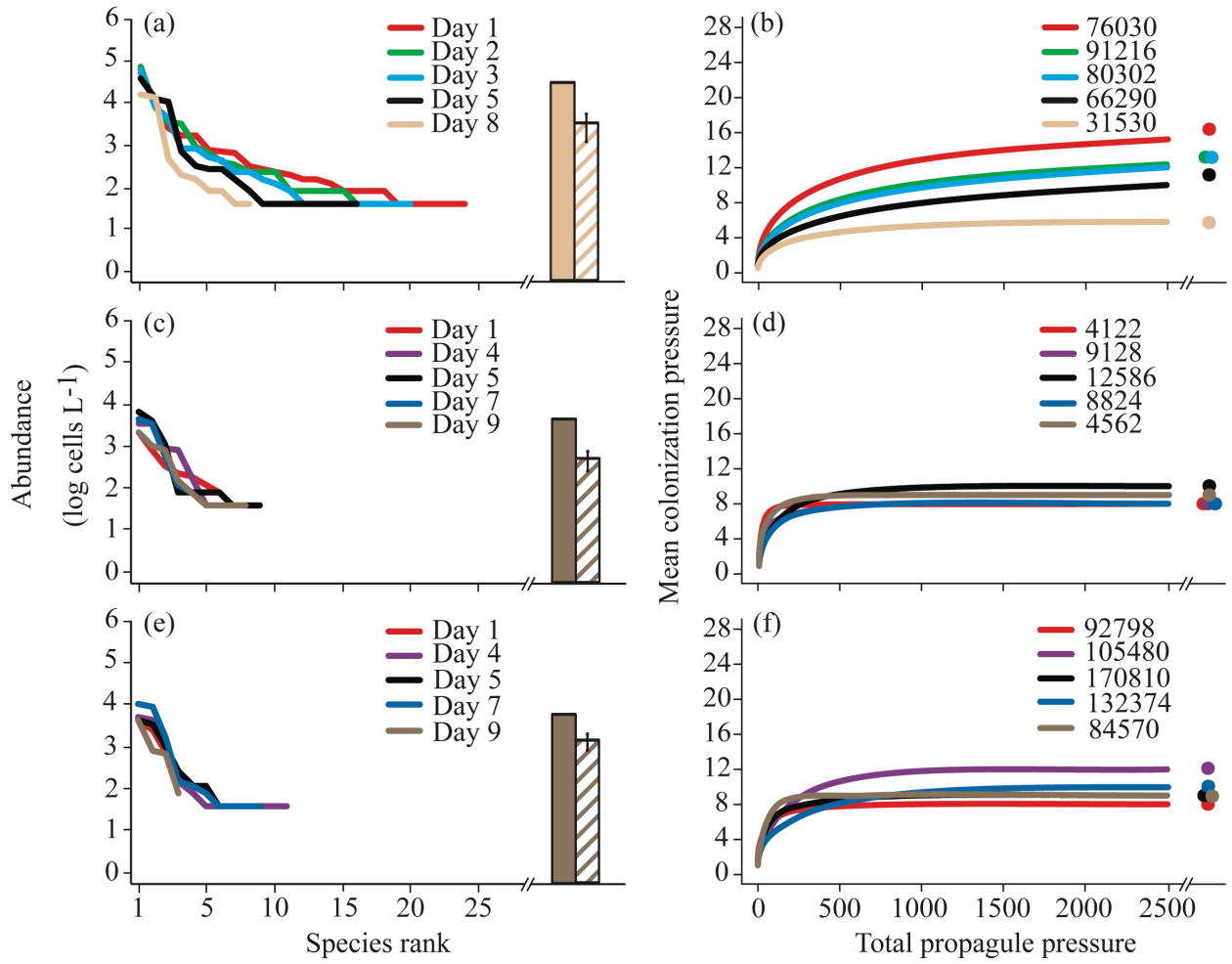
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67 Figure S2.



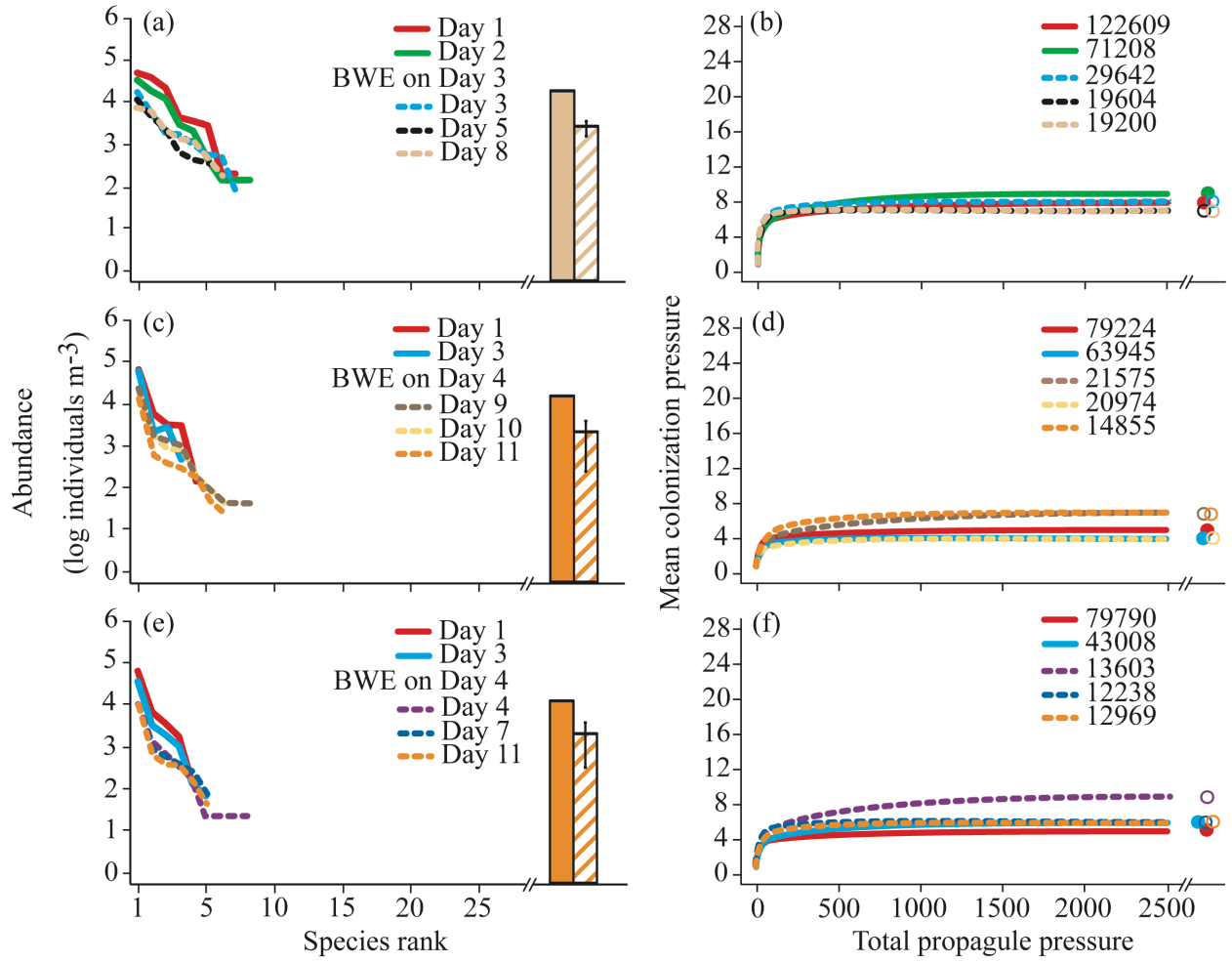
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69 Figure S3.



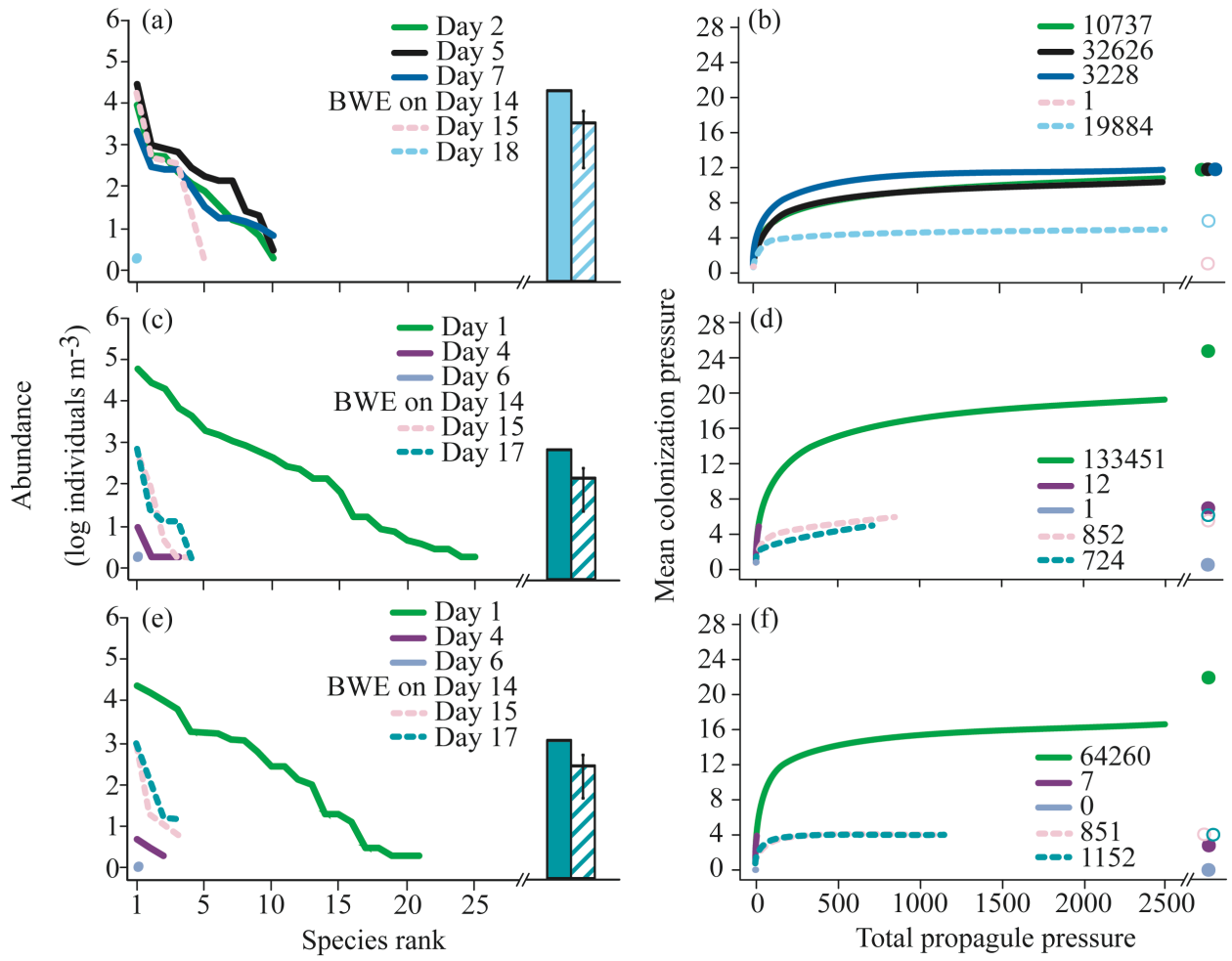
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71 Figure S4.



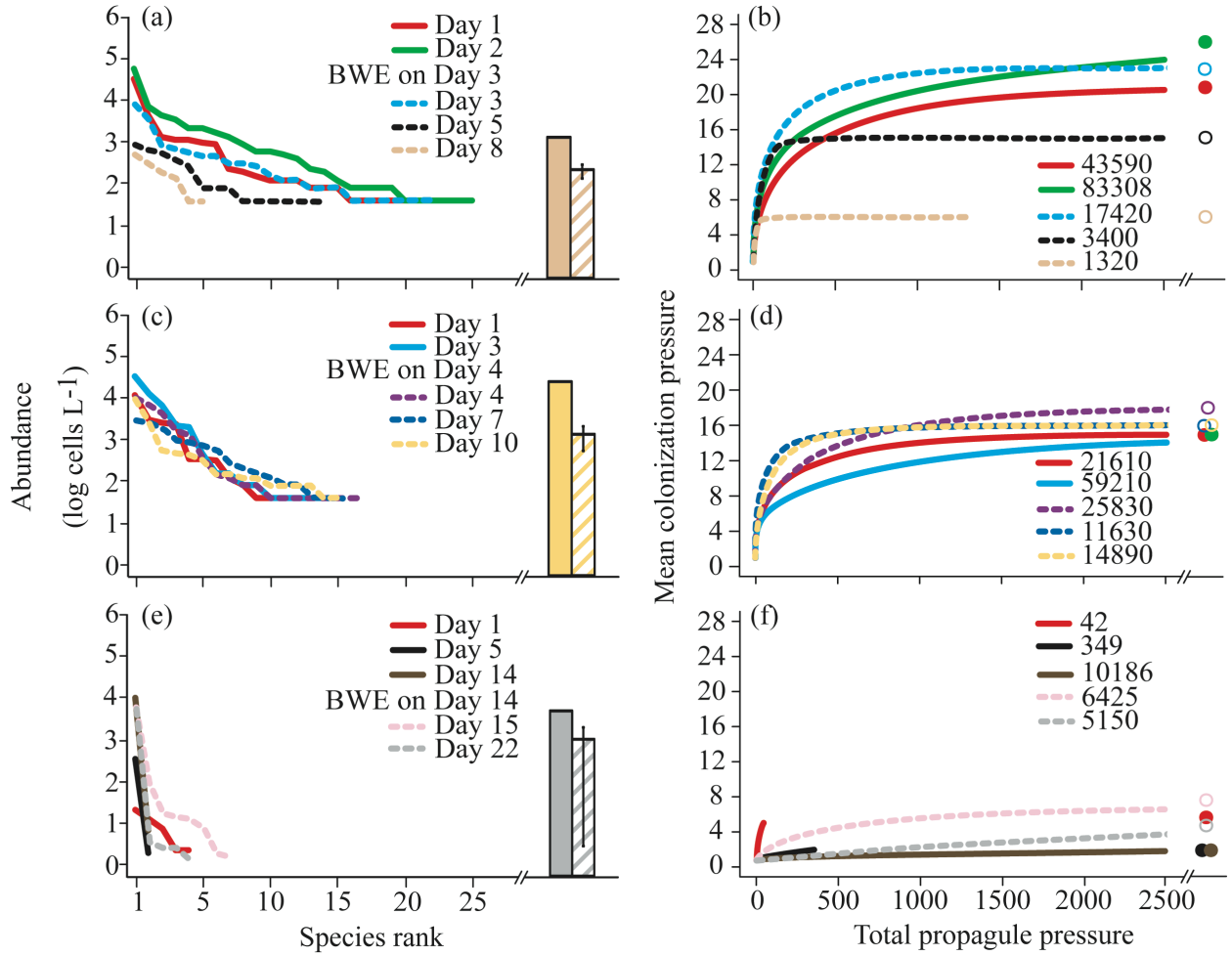
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73 Figure S5.



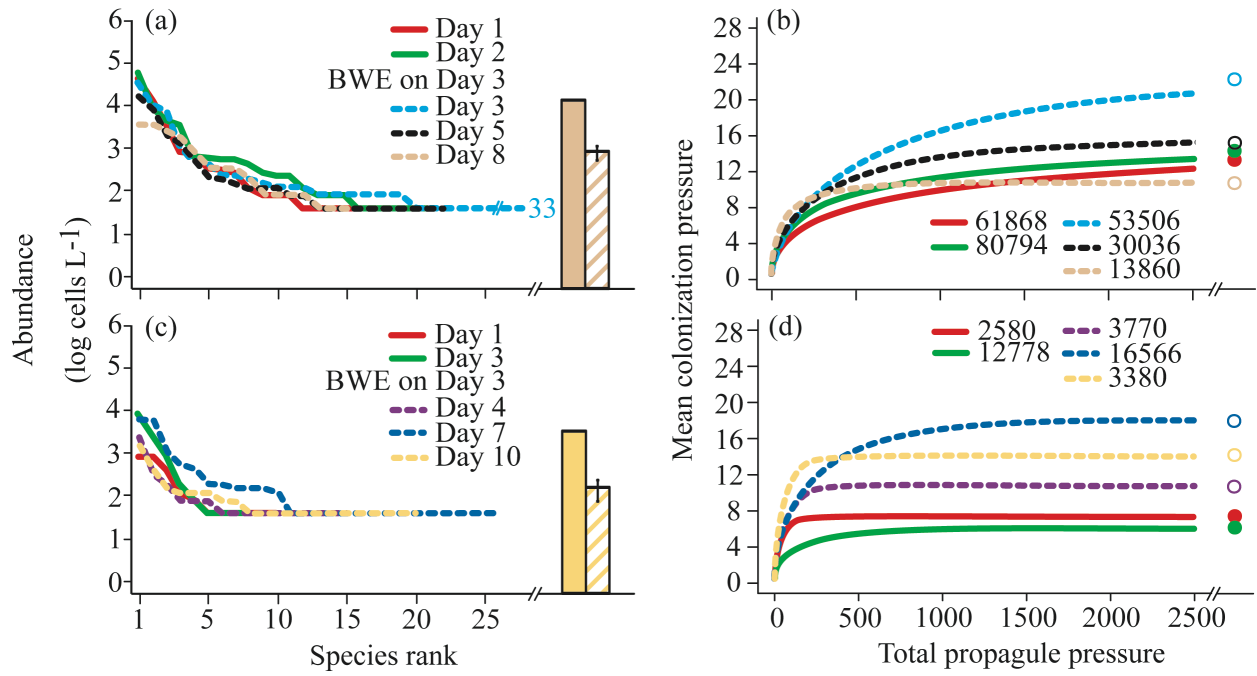
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75 Figure S6.



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77 Figure S7.



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79 Figure S8.