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| Table 1. Summary of literature review targeting studies using ecological forecasting methods. | | | | | |
| Authors & Year | Approach | Best Model | Ecosystem | Forecast Product | Use of forecast product in decision making (Y/N) |
| Araujo et al. 2005 | Uses multiple empirical models to assess uncertainty in projections | Empirical | Temperate forests and urban | Bird species ranges | N |
| Brown et al. 2013 | Coupled process-based and empirical model to predict water quality | Process-based and empirical | Temperate estuary | Chesapeake Bay water quality | Y |
| Dean et al. 2004 | Combines climate projections and process-based model to make probabilistic projections | Process-based | Central highland forests | Carbon sequestration in forests | N |
| Estes et al. 2013 | Comparison of empirical and process-based models | Empirical | Agricultural dryland | Productivity and suitability of crops in South Africa | N |
| Gonzalez-Benecke et al. 2017 | Future projections of forest growth | Process-based | Southern-temperate forest | Loblolly Pine projections | N |
| Hazen et al. 2017 | Coupled empirical models to produce habitat suitability forecasts | Empirical | Marine | 8-day forecasts of Blue Whale density | Y |
| Lindegren et al. 2013 | Forecast impacts of climate and fishing pressure on marine food webs | Process-based | Marine | Baltic cod dynamics | N |
| Martinez-Meyer et al. 2004 | Used machine-learning techniques to predict species distributions during past geological time periods based on current distributions | Empirical | Conterminous United States during the present and the Pleistocene Era | Ecological niches of mammal species | N |
| Perretti et al. 2013 | Compared forecast efficiency of mechanistic and empirical models | Empirical | Simulated and laboratory data for beetle species | Species abundance | N |
| Stow et al. 2003 | Compared forecast efficiency of two process-based and one empirical model | Process-based and empirical | Temperate estuary | Neuse River Estuarine water quality | Y |
| Thomas et al. 2018 | Used an empirical approach to determine forecast efficiency at multiple time scale (hours, months, years) | Empirical | Freshwater | Phytoplankton dynamics | N |
| Thuiller et al. 2004 | Examined the sensitivity of an empirical model to restrictions in input driver data | Empirical | Temperate forest | Tree species distributions | N |
| White and Nemani 2004 | Used a process-based model to determine the relative importance of meteorology and vegetation phenology | Process-based | Temperate forest | Soil water concentrations | N |
| Woodbury et al. 1998 | Quantified forecast uncertainties from climate driver data, forest condition, and quantitative relationships using an empirical model | Empirical | Temperate forest | Loblolly pine growth | N |

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| Table 1. Summary of literature review targeting studies using ecological forecasting methods | | | |
| Citation | Best Model | Forecast Product | Use of forecast product (basic or applied) |
| Araujo et al. 2005 | Empirical | Bird species ranges | Basic |
| Araujo et al. 2006 | Empirical | Amphibian and reptile species distributions | Basic |
| Brown et al. 2013 | Process-based and empirical | Chesapeake Bay water quality | Applied |
| Dean et al. 2004 | Process-based | Carbon sequestration in forests | Basic |
| Estes et al. 2013 | Empirical | Productivity and suitability of crops in South Africa | Basic |
| Fenocci et al. 2019 | Process-based | Phytoplankton dynamics | Basic |
| Hazen et al. 2017 | Empirical | Blue whale density | applied |
| Lindegren et al. 2013 | Process-based | Baltic cod dynamics | Basic |
| Liu et al. 2006 | Empirical | Coral Reef Bleaching | Applied |
| Martinez-Meyer et al. 2004 | Empirical | Ecological niches of mammal species | Basic |
| Perretti et al. 2013 | Empirical | Species abundance | Basic |
| Stow et al. 2003 | Process-based and empirical | Estuarine water quality | Applied |
| Thomas et al. 2018 | Empirical | Phytoplankton dynamics | Basic |
| Thuiller et al. 2004 | Empirical | Tree species distributions | Basic |
| White and Nemani 2004 | Process-based | Soil water | Basic |

Payne et al 2017, Lessons from the First Generation of Marine Ecological Forecast Products

* + 1. More of a review of marine ‘forecasting’
    2. Table 1 includes other forecast studies and what type of model they used