



## James Fahlbusch

- Ph.D. Student in Biology, admitted Autumn 2018
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### Publications

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#### PUBLICATIONS

- **Blue whales increase feeding rates at fine-scale ocean features.** *Proceedings. Biological sciences*  
Fahlbusch, J. A., Czapanskiy, M. F., Calambokidis, J., Cade, D. E., Abrahms, B., Hazen, E. L., Goldbogen, J. A.  
2022; 289 (1981): 20221180
- **Social exploitation of extensive, ephemeral, environmentally controlled prey patches by supergroups of rorqual whales** *Animal Behaviour*  
Cade, D. E., Fahlbusch, J. A., et al  
2021; 182: 251-266
- **Animal-Borne Metrics Enable Acoustic Detection of Blue Whale Migration.** *Current biology : CB*  
Oestreich, W. K., Fahlbusch, J. A., Cade, D. E., Calambokidis, J., Margolina, T., Joseph, J., Friedlaender, A. S., McKenna, M. F., Stimpert, A. K., Southall, B. L., Goldbogen, J. A., Ryan, J. P.  
2020
- **Differential Vulnerability to Ship Strikes Between Day and Night for Blue, Fin, and Humpback Whales Based on Dive and Movement Data From Medium Duration Archival Tags** *FRONTIERS IN MARINE SCIENCE*  
Calambokidis, J., Fahlbusch, J. A., Szescioroka, A. R., Southall, B. L., Cade, D. E., Friedlaender, A. S., Goldbogen, J. A.  
2019; 6
- **Field measurements reveal exposure risk to microplastic ingestion by filter-feeding megafauna.** *Nature communications*  
Kahane-Rappoport, S. R., Czapanskiy, M. F., Fahlbusch, J. A., Friedlaender, A. S., Calambokidis, J., Hazen, E. L., Goldbogen, J. A., Savoca, M. S.  
2022; 13 (1): 6327
- **Oceanic giants dance to atmospheric rhythms: Ephemeral wind-driven resource tracking by blue whales.** *Ecology letters*  
Ryan, J. P., Benoit-Bird, K. J., Oestreich, W. K., Leary, P., Smith, K. B., Waluk, C. M., Cade, D. E., Fahlbusch, J. A., Southall, B. L., Joseph, J. E., Margolina, T., Calambokidis, J., DeVogelaere, et al  
2022
- **A satellite-linked tag for the long-term monitoring of diving behavior in large whales** *ANIMAL BIOTELEMETRY*  
Palacios, D. M., Irvine, L. M., Lagerquist, B. A., Fahlbusch, J. A., Calambokidis, J., Tomkiewicz, S. M., Mate, B. R.  
2022; 10 (1)
- **An accelerometer-derived ballistocardiogram method for detecting heart rates in free-ranging marine mammals.** *The Journal of experimental biology*  
Czapanskiy, M. F., Ponganis, P. J., Fahlbusch, J. A., Schmitt, T. L., Goldbogen, J. A.  
2022
- **From individual responses to population effects: Integrating a decade of multidisciplinary research on blue whales and sonar** *ANIMAL CONSERVATION*  
Pirota, E., Booth, C. G., Calambokidis, J., Costa, D. P., Fahlbusch, J. A., Friedlaender, A. S., Goldbogen, J. A., Harwood, J., Hazen, E. L., New, L., Santora, J. A., Watwood, S. L., Wertman, et al  
2022
- **Scaling of maneuvering performance in baleen whales: larger whales outperform expectations.** *The Journal of experimental biology*

- Segre, P. S., Gough, W. T., Roualdes, E. A., Cade, D. E., Czapanskiy, M. F., Fahlbusch, J., Kahane-Rapport, S. R., Oestreich, W. K., Bejder, L., Bierlich, K. C., Burrows, J. A., Calambokidis, J., Chenoweth, et al  
2022; 225 (5)
- **Integrating remote sensing methods during controlled exposure experiments to quantify group responses of dolphins to navy sonar.** *Marine pollution bulletin*  
Durban, J. W., Southall, B. L., Calambokidis, J., Casey, C., Fearnbach, H., Joyce, T. W., Fahlbusch, J. A., Oudejans, M. G., Fregosi, S., Friedlaender, A. S., Kellar, N. M., Visser, F.  
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  - **Baleen whale prey consumption based on high-resolution foraging measurements.** *Nature*  
Savoca, M. S., Czapanskiy, M. F., Kahane-Rapport, S. R., Gough, W. T., Fahlbusch, J. A., Bierlich, K. C., Segre, P. S., Di Clemente, J., Penry, G. S., Wiley, D. N., Calambokidis, J., Nowacek, D. P., Johnston, et al  
2021; 599 (7883): 85-90
  - **Tools for integrating inertial sensor data with video bio-loggers, including estimation of animal orientation, motion, and position** *ANIMAL BIOTELEMETRY*  
Cade, D. E., Gough, W. T., Czapanskiy, M. F., Fahlbusch, J. A., Kahane-Rapport, S. R., Linsky, J. J., Nichols, R. C., Oestreich, W. K., Wisniewska, D. M., Friedlaender, A. S., Goldbogen, J. A.  
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  - **Context-dependent variability in the predicted daily energetic costs of disturbance for blue whales.** *Conservation physiology*  
Pirotta, E. n., Booth, C. G., Cade, D. E., Calambokidis, J. n., Costa, D. P., Fahlbusch, J. A., Friedlaender, A. S., Goldbogen, J. A., Harwood, J. n., Hazen, E. L., New, L. n., Southall, B. L.  
2021; 9 (1): coaa137
  - **Predator#scale spatial analysis of intra#patch prey distribution reveals the energetic drivers of roqual whale super#group formation** *Functional Ecology*  
Cade, D. E., Seakamela, M., Findlay, K. P., Fukunaga, J., Kahane#Rapport, S. R., Warren, J. D., Calambokidis, J., Fahlbusch, J. A., Friedlaender, A. S., Hazen, E. L., Kotze, D., McCue, S., Mejer, et al  
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  - **Lunge filter feeding biomechanics constrain roqual foraging ecology across scale.** *The Journal of experimental biology*  
Kahane-Rapport, S. R., Savoca, M. S., Cade, D. E., Segre, P. S., Bierlich, K. C., Calambokidis, J., Dale, J., Fahlbusch, J. A., Friedlaender, A. S., Johnston, D. W., Werth, A. J., Goldbogen, J. A.  
2020
  - **Seasonal activity levels of a farm-island population of striated caracaras (Phalacrocorax australis) in the Falkland Islands** *Animal Biotelemetry*  
Harrington, K. J., Fahlbusch, J. A., Langrock, R., Therrien, J., Houtz, J. L., McDonald, B. I.  
2020; 8
  - **A Case Study of a Near Vessel Strike of a Blue Whale: Perceptual Cues and Fine-Scale Aspects of Behavioral Avoidance** *FRONTIERS IN MARINE SCIENCE*  
Szescioroka, A. R., Allen, A. N., Calambokidis, J., Fahlbusch, J., McKenna, M. F., Southall, B.  
2019; 6
  - **Extreme bradycardia and tachycardia in the world's largest animal** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Goldbogen, J. A., Cade, D. E., Calambokidis, J., Czapanskiy, M. F., Fahlbusch, J., Friedlaender, A. S., Gough, W. T., Kahane-Rapport, S. R., Savoca, M. S., Ponganis, K. V., Ponganis, P. J.  
2019; 116 (50): 25329–32
  - **A low-cost, open-source inertial movement GPS logger for eco-physiology applications.** *The Journal of experimental biology*  
Fahlbusch, J. A., Harrington, K. J.  
2019
  - **The advantages of diving deep: Fin whales quadruple their energy intake when targeting deep krill patches** *FUNCTIONAL ECOLOGY*  
Friedlaender, A. S., Bowers, M. T., Cade, D., Hazen, E. L., Stimpert, A. K., Allen, A. N., Calambokidis, J., Fahlbusch, J., Segre, P., Visser, F., Southall, B. L., Goldbogen, J. A.  
2019
  - **Context-dependent variability in blue whale acoustic behaviour** *ROYAL SOCIETY OPEN SCIENCE*

Lewis, L. A., Calambokidis, J., Stimpert, A. K., Fahlbusch, J., Friedlaender, A. S., McKenna, M. F., Mesnick, S. L., Oleson, E. M., Southall, B. L., Szescioroka, A. R., Sirovic, A.  
2018; 5 (8): 180241