

# Check bibliography output

October 18, 2024

## All in-line text citations

Alaska Fisheries Information Network (AKFIN) (2024)

Resource Assessment and Division (2017)

Resource Assessment and Division (2021)

Resource Assessment and Division (2023a)

Resource Assessment and Division (2023b)

Allen et al. (2014)

Alton et al. (1998)

Alverson and Pereyra (1969)

Anderson et al. (2023)

Armstrong et al. (1998)

Aydin et al. (2014)

Baker and Hollowed (2014)

Baker (2021)

Bakkala and Smith (1978)

Bakkala and Wakabayashi (1985)

Bakkala (1993)

Bakkala et al. (1985)

Barbeaux et al. (2020)

Berg et al. (2014)

Blackwell et al. (2000)

Boldt and Haldorson (2004)

Bolin et al. (2021)

Bond et al. (2015)

Britt et al. (2021)

Brodeur et al. (2004)

Bryan et al. (2021)

Chilton et al. (2011)

Ciannelli and Bailey (2005)

Coachman (1986)  
Cokelet (2016)  
Conner and Lauth (2017a)  
Conner and Lauth (2017b)  
Conner, Nichol, et al. (2017)  
Conner, Stevenson, et al. (2017a)  
Conner, Stevenson, et al. (2017b)  
Cooper and Nichol (2016)  
Cooper et al. (2020)  
Courcelles (2011)  
Daly et al. (2016)  
Decker et al. (2023)  
Delean et al. (2020)  
Drumm et al. (2016)  
Eisner et al. (2020)  
Fadeev (1965)  
Faunce (2016)  
Feder et al. (2005)  
Fedewa et al. (2020)  
Fenske et al. (2019)  
Fissel et al. (2019)  
Fissel et al. (2021)  
Francis et al. (2003)  
Fricke et al. (2022)  
Froese (2006)  
Ganz and Faunce (2019a)  
Ganz and Faunce (2019b)  
Goddard (1997)  
Grüss et al. (2020)  
Grüss et al. (2021a)  
Grüss et al. (2021b)  
Guthrie et al. (2020)  
Guthrie et al. (2019)  
Haberle et al. (2023)  
Halliday and Sassano (1988)  
Hamazaki et al. (2005)

Helker et al. (2015)  
Helker et al. (2016)  
Helker et al. (2017)  
Helker et al. (2019)  
Hoff and Britt (2011)  
Hoff (2016)  
Hollowed et al. (2007)  
Hunt et al. (2011)  
Hurst et al. (2021)  
Ianelli et al. (2016)  
Ianelli et al. (2017)  
Jefferson et al. (2019)  
Kearney (2019)  
Knight et al. (1991)  
Kotwicki et al. (2005)  
Kotwicki et al. (2015)  
Kotwicki et al. (2014)  
Kotwicki and Lauth (2013)  
Kotwicki et al. (2017)  
Kotwicki and Ono (2019)  
Laman et al. (2022)  
Lang et al. (2018a)  
Lang et al. (2018b)  
Lang et al. (2019)  
Lauth et al. (2019)  
Lauth and Kotwicki (2014)  
Lauth (2011)  
Lindeberg and Lindstrom (2019)  
Markowitz et al. (2023)  
Markowitz, Dawson, Anderson, et al. (2022)  
Markowitz, Dawson, Charriere, Prohaska, Rohan, Haehn, et al. (2022)  
Markowitz, Dawson, Charriere, Prohaska, Rohan, Stevenson, et al. (2022b)  
Markowitz, Dawson, Charriere, Prohaska, Rohan, Stevenson, et al. (2022a)  
Markowitz et al. (2024)  
McGilliard et al. (2016)  
McGilliard et al. (2018)

Mecklenburg et al. (2002)  
Miller (2013)  
Muto et al. (2020)  
NOAA Fisheries Alaska Fisheries Science Center, Groundfish Assessment Program (2024)  
NOAA Fisheries Alaska Fisheries Science Center (2024)  
NOAA Fisheries (2023)  
Nichol et al. (2019)  
Nichol and Somerton (2009)  
Nichol (1995b)  
Nichol (1995a)  
Nichol (1997)  
Nichol (1998)  
Nielsen, Bryan, et al. (2023)  
Nielsen, McDermott, et al. (2023)  
Nielsen et al. (In review)  
O’Leary et al. (2022)  
Oke et al. (2022)  
Paul and Paul (1999)  
Pereyra et al. (1976)  
Rand et al. (2024)  
Rodgveller (2019)  
S. K. Rohan et al. (2024)  
S. Rohan et al. (2022)  
Rose and Walters (1990)  
Ruzicka et al. (2020)  
Shotwell, Bryan, et al. (2022)  
Shotwell, Sullivan, et al. (2022)  
Shubnikov and Lisovenko (1964)  
Sigler et al. (2015)  
Siple et al. (2024)  
Smith and Bakkala (1982)  
Sohn et al. (2010)  
Somerton et al. (2002)  
Somerton and Otto (1999)  
Spencer (2008)  
Spies et al. (2022)

Spies et al. (2020)  
 Spies et al. (2021)  
 Spies et al. (2011)  
 Spies et al. (2018)  
 Stabeno et al. (2001)  
 Stabeno, Farley, et al. (2012)  
 Stabeno, Kachel, et al. (2012)  
 Stabeno and Bell (2019)  
 Stauffer (2004)  
 Stevens and MacIntosh (1990)  
 Stevenson and Hoff (2009)  
 Stevenson and Lauth (2012)  
 Stevenson and Lauth (2019)  
 Stevenson et al. (2021)  
 Stevenson, Markowitz, et al. (2022)  
 Stevenson and Sheiko (2009)  
 Stevenson et al. (2016)  
 Stevenson (2015)  
 Stevenson, Kotwicki, et al. (2022)  
 Stewart and Martell (2015)  
 Stewart and Monnahan (2014)  
 Sullivan and Faunce (2018)  
 TenBrink (2022)  
 The Plan Team for the Groundfish Fisheries of the Bering Sea and Aleutian Islands (2017)  
 The Plan Team for the Groundfish Fisheries of the Bering Sea and Aleutian Islands (2018)  
 The Plan Team for the Groundfish Fisheries of the Bering Sea and Aleutian Islands (2019)  
 The Plan Team for the Groundfish Fisheries of the Bering Sea and Aleutian Islands (2020)  
 The Plan Team for the Groundfish Fisheries of the Bering Sea and Aleutian Islands (2021)  
 The Plan Team for the Groundfish Fisheries of the Bering Sea and Aleutian Islands (2022a)  
 The Plan Team for the Groundfish Fisheries of the Bering Sea and Aleutian Islands (2022b)  
 The Plan Team for the Groundfish Fisheries of the Bering Sea and Aleutian Islands  
 Thompson (2018)  
 Thorson et al. (2020)  
 Thorson (2019)  
 Vestfals et al. (2016)  
 Von Szalay et al. (2023)

Von Szalay and Raring (2018)  
 Von Szalay and Raring (2020)  
 Wakabayashi et al. (1985)  
 R. Webster and Stewart (2023)  
 R. A. Webster et al. (2020)  
 Wilderbuer et al. (2018)  
 Wood (2004)  
 Wuenschel et al. (2019)  
 Wyllie-Echeverria and Wooster (1998)  
 Yang and Livingston (1986)  
 Yang (1988)  
 Zacher, Richar, Fedewa, et al. (2023b)  
 Zacher, Richar, Fedewa, et al. (2023a)  
 Zacher et al. (2024)  
 Zacher et al. (2020)  
 Zacher, Richar, and Litzow (2023)  
 Zador et al. (2011)  
 Zhang et al. (1998)  
 Zimmermann et al. (2009)  
 Zimmermann and Goddard (1996)

## Works cited

- Alaska Fisheries Information Network (AKFIN). (2024). *AFSC groundfish assessment program design-based production data*. NOAA Fisheries Alaska Fisheries Science Center, Groundfish Assessment Program; <https://akfinbi.psmfc.org/analytics/>; U.S. Dep. Commer. <https://www.psmfc.org/program/alaska-fisheries-information-network-akfin>
- Allen, B. M., Helker, V. T., and Jemison, L. A. (2014). *Human-caused injury and mortality of NMFS-managed Alaska marine mammal stocks, 2007-2011* (NOAA Tech. Memo. NMFS-AFSC-274). U.S. Dep. Commer. <https://repository.library.noaa.gov/view/noaa/4687>
- Alton, M. S., Bakkala, R. G., E., W. G., and Munro, P. T. (1998). *Greenland turbot (Reinhardtius hippoglossoides) of the eastern Bering Sea and Aleutian Islands region* [NOAA Tech. Rep.]. *NMFS-71*. <https://spo.nmfs.noaa.gov/content/tr-71-greenland-turbot-reinhardtius-hippoglossoides-eastern-bering-sea-and-aleutian-islands>
- Alverson, D. L., and Pereyra, W. T. (1969). Demersal fish explorations in the northeastern Pacific Ocean – an evaluation of exploratory fishing methods and analytical approaches to stock size and yield forecasts. *J. Fish. Res. Bd. Can.*, 26(8), 1985–2001. <https://doi.org/10.1139/f69-188>
- Anderson, S., Bacheler, N., Barnett, L., Berg, C., Blackhart, K., Bolser, D., Börjesson, P., Bryan, M., Cariou, T., Chaves, C., Chilton, E., Conner, J., De Groote, A., DeFilippo, L., Dolder, P., Foley, C., Gerritsen, H., Hall, M., Johnsen, E., . . . Yalcin, S. (2023). *Workshop on unavoidable survey effort reduction 2 (WKUSER2)* (H. Gerritsen, S. Kotwicki, & K. Ono, Eds.; ICES Scientific Reports 13; Vol. 5). U.S. Dep. Commer. <https://doi.org/10.17895/ices.pub.22086845>

- Armstrong, J., Armstrong, D., and Hilborn, R. (1998). Crustacean resources are vulnerable to serial depletion – the multifaceted decline of crab and shrimp fisheries in the greater Gulf of Alaska. *Rev. Fish Biol. Fish.*, 8(2), 117–176. <https://doi.org/10.1023/a:1008891412756>
- Aydin, K., Barbeaux, S., Barnard, D., Chilton, L., Clark, B., Conners, M. E., Conrath, C., Dalton, M., Echave, K., and Fritz, L. (2014). *Stock assessment and fishery evaluation report for the groundfish resources of the Bering Sea/Aleutian Islands regions*. North Pacific Fishery Management Council.
- Baker, M. R. (2021). Contrast of warm and cold phases in the Bering Sea to understand spatial distributions of arctic and sub-arctic gadids. *Polar Biol.*, 44, 1083–1105. <https://doi.org/10.1007/s00300-021-02856-x>
- Baker, M. R., and Hollowed, A. B. (2014). Delineating ecological regions in marine systems: Integrating physical structure and community composition to inform spatial management in the eastern Bering Sea. *Deep-Sea Res. II*, 109, 215–240. <https://doi.org/10.1016/j.dsr2.2014.03.001>
- Bakkala, R. G. (1993). *Structure and historical changes in the groundfish complex of the eastern Bering Sea* [NOAA Tech. Rep.]. NMFS-114. <https://repository.library.noaa.gov/view/noaa/6111>
- Bakkala, R. G., and Smith, G. B. (1978). *Demersal fish resources of the eastern Bering Sea; spring 1976* [NOAA Tech. Rep.]. SSRF-754. <https://spo.nmfs.noaa.gov/content/demersal-fish-resources-eastern-bering-sea-spring-1976>
- Bakkala, R. G., Traynor, J. J., Teshima, K., Shimada, A. M., and Yamaguchi, H. (1985). *Results of cooperative U.S.-Japan groundfish investigations in the eastern Bering Sea during June-November 1982* (NOAA Tech. Memo. NMFS-F/NWC-87; p. 456). <https://repository.library.noaa.gov/view/noaa/23324>
- Bakkala, R. G., and Wakabayashi, K. (1985). Results of cooperative U.S.-Japan groundfish investigations in the Bering Sea during May-August 1979. *International North Pacific Fisheries Commission Bulletin*, 44, 252.
- Barbeaux, S. J., Holsman, K., and Zador, S. (2020). Marine heatwave stress test of ecosystem-based fisheries management in the Gulf of Alaska Pacific cod fishery. *Front. Mar. Sci.*, 7, 1–21. <https://doi.org/10.3389/fmars.2020.00703>
- Berg, C. W., Nielsen, A., and Kristensen, K. (2014). Evaluation of alternative age-based methods for estimating relative abundance from survey data in relation to assessment models. *Fish. Res.*, 151, 91–99. <https://doi.org/10.1016/j.fishres.2013.10.005>
- Blackwell, B. G., Brown, M. L., and Willis, D. W. (2000). Relative weight (Wr) status and current use in fisheries assessment and management. *Rev. Fish. Sci. Aquac.*, 8(1), 1–44. <https://doi.org/10.1080/10641260091129161>
- Boldt, J. L., and Haldorson, L. J. (2004). Size and condition of wild and hatchery pink salmon juveniles in Prince William Sound, Alaska. *Trans. Am. Fish. Soc.*, 133(1), 173–184. <https://doi.org/10.1577/t02-138>
- Bolin, J. A., Schoeman, D. S., Evans, K. J., Cummins, S. F., and Scales, K. L. (2021). Achieving sustainable and climate-resilient fisheries requires marine ecosystem forecasts to include fish condition. *Fish and Fisheries*, 22(5), 1067–1084. <https://doi.org/10.1111/faf.12569>
- Bond, N. A., Cronin, M. F., Freeland, H., and Mantua, N. (2015). Causes and impacts of the 2014 warm anomaly in the NE Pacific. *Geophys. Res. Lett.*, 42(9), 3414–3420. <https://doi.org/10.1002/2015GL063306>
- Britt, L. L., Markowitz, E. H., Dawson, E. J., Charriere, N. E., Prohaska, B. K., Rohan, S. K., Stevenson, D. E., and Britt, L. L. (2021). *2021 northern Bering Sea groundfish and crab trawl survey highlights* [Outreach]. <https://youtu.be/putpYJtPRF8>
- Brodeur, R. D., Fisher, J. P., Teel, D. J., Emmett, R. L., Casillas, E., and Miller, T. W. (2004). Juvenile salmonid distribution, growth, condition, origin, and environmental and species associations in the northern California Current. *Fish. Bull.*, 102(1), 25–46.
- Bryan, D. R., McDermott, S. F., Nielsen, J. K., Fraser, D., and Rand, K. M. (2021). Seasonal migratory patterns of pacific cod (*Gadus macrocephalus*) in the aleutian islands. *Anim. Biotelemetry*, 9(24). <https://doi.org/10.1186/s40317-021-00250-2>
- Chilton, E. A., Armistead, C. E., and Foy, R. J. (2011). *The 2010 eastern Bering Sea continental shelf bottom trawl survey: Results for commercial crab species* (NOAA Tech. Memo. NMFS-AFSC-216; p. 62). U.S. Dep. Commer. <https://repository.library.noaa.gov/view/noaa/3776>
- Ciannelli, L., and Bailey, K. M. (2005). Landscape dynamics and resulting species interactions: The cod-capelin system in the southeastern Bering Sea. *Mar. Ecol. Prog. Ser.*, 291, 227–236. <https://doi.org/>

10.3354/meps291227

- Coachman, L. K. (1986). Circulation, water masses, and fluxes on the southeastern Bering Sea shelf. *Cont. Shelf Res.*, 5(1-2), 23–108. [https://doi.org/10.1016/0278-4343\(86\)90011-7](https://doi.org/10.1016/0278-4343(86)90011-7)
- Cokelet, E. D. (2016). 3-D water properties and geostrophic circulation on the eastern Bering Sea shelf. *Deep Sea Res. Part II Top. Stud. Oceanogr.*, 134, 65–85. <https://doi.org/10.1016/j.dsr2.2016.08.009>
- Conner, J., and Lauth, R. R. (2017a). *Results of the 2016 eastern Bering Sea continental shelf bottom trawl survey of groundfish and invertebrate resources* (NOAA Tech. Memo. NOAA-AFSC-352). U.S. Dep. Commer. <https://doi.org/10.7289/V5/TM-AFSC-352>
- Conner, J., and Lauth, R. R. (2017b). *Results of the 2016 eastern Bering Sea continental shelf bottom trawl survey of groundfish and invertebrate resources* (NOAA Tech. Memo. NMFS-AFSC-352). U.S. Dep. Commer. <https://doi.org/10.7289/V5/TM-AFSC-352>
- Conner, J., Nichol, D. G., and Lauth, R. R. (2017). *Results of the 2015 eastern Bering Sea continental shelf bottom trawl survey of groundfish and invertebrate resources* (NOAA Tech. Memo. NMFS-AFSC-353). U.S. Dep. Commer. <https://doi.org/10.7289/V5/TM-AFSC-353>
- Conner, J., Stevenson, D. E., and Lauth, R. R. (2017b). *Results of the 2014 eastern Bering Sea continental shelf bottom trawl survey of groundfish and invertebrate resources* (NOAA Tech. Memo. NOAA-AFSC-350). U.S. Dep. Commer. <https://doi.org/10.7289/V5/TM-AFSC-350>
- Conner, J., Stevenson, D. E., and Lauth, R. R. (2017a). *Results of the 2014 eastern Bering Sea continental shelf bottom trawl survey of groundfish and invertebrate resources* (NOAA Tech. Memo. NMFS-AFSC-350). U.S. Dep. Commer. <https://doi.org/10.7289/V5/TM-AFSC-350>
- Cooper, D. W., and Nichol, D. G. (2016). Juvenile northern rock sole (*Lepidopsetta polyxystra*) spatial distribution and abundance patterns in the eastern Bering Sea: Spatially dependent production linked to temperature. *ICES J. Mar. Sci.*, 73(4), 1138–1146. <https://doi.org/10.1093/icesjms/fsw005>
- Cooper, D. W., Rogers, L. A., and Wilderbuer, T. (2020). Environmentally driven forecasts of northern rock sole (*Lepidopsetta polyxystra*) recruitment in the eastern Bering Sea. *Fish. Oceanogr.*, 29, 111–121. <https://doi.org/10.1111/fog.12458>
- Courcelles, D. (2011). Re-evaluation of the length-weight relationship of Pacific halibut (*Hippoglossus stenolepis*). *International Pacific Halibut Commission Report of Assessment and Research Activities*, 459–470.
- Daly, B., Armistead, C. E., and Foy, R. J. (2016). *The 2016 eastern Bering Sea continental shelf bottom trawl survey: Results for commercial crab species* (NOAA Tech. Memo. NMFS-AFSC-327). U.S. Dep. Commer. <https://doi.org/10.7289/V5/TM-AFSC-327>
- Decker, M. B., Brodeur, R. D., Ciannelli, L., Britt, L. L., Bond, N. A., DiFiore, B. P., and Hunt, G. L. (2023). Cyclic variability of eastern Bering Sea jellyfish relates to regional physical conditions. *Prog. Oceanogr.*, 210(June 2022), 102923. <https://doi.org/10.1016/j.pocean.2022.102923>
- Delean, B. J., Helker, V. T., Muto, M. M., Savage, K., Teerlink, S., Jemison, L. A., Wilkinson, K., Jannot, J., and Young, N. C. (2020). *Human-caused mortality and injury of NMFS-managed Alaska marine mammal stocks 2013-2017* (NOAA Tech. Memo. NMFS-AFSC-401). U.S. Dep. Commer. <https://doi.org/10.25923/85XQ-BS63>
- Drumm, D. T., Maslenikov, K. P., Van Syoc, R., Orr, J. W., Lauth, R. R., Stevenson, D. E., and Pietsch, T. W. (2016). *An annotated checklist of the marine macroinvertebrates of Alaska* [NOAA Professional Paper NMFS]. 19, 289. <https://doi.org/10.7755/PP.19>
- Eisner, L. B., Zuenko, Y. I., Basyuk, E. O., Britt, L. L., Duffy-Anderson, J. T., Kotwicki, S., Ladd, C., and Cheng, W. (2020). Environmental impacts on walleye pollock (*Gadus chalcogrammus*) distribution across the Bering Sea shelf. *Part II Top. Stud. Oceanogr.*, 104881, 181–182. <https://doi.org/10.1016/j.dsr2.2020.104881>
- Fadeev, N. S. (1965). Comparative outline of the biology of flatfishes in the southeastern part of the Bering Sea and condition of their resources. *Soviet Fisheries Investigations in the Northeastern Pacific*, 4, 112–129.
- Faunce, C. H. (2016). *Alternative sampling designs for the 2017 annual deployment plan of the north Pacific observer program* (NOAA Tech. Memo. NMFS-AFSC-228). U.S. Dep. Commer. <https://doi.org/10.7289/V5/TM-AFSC-338>
- Feder, H. M., Jewett, S. C., and Blanchard, A. (2005). Southeastern Chukchi Sea (Alaska) epibenthos. *Polar Biol.*, 28, 402–421. <https://doi.org/10.1007/s00300-004-0683-4>



- Fedewa, E. J., Jackson, T. M., Richar, J. I., Gardner, J. L., and Litzow, M. A. (2020). Recent shifts in northern Bering Sea snow crab (*Chionoecetes opilio*) size structure and the potential role of climate-mediated range contraction. *Deep Sea Res. Part II Top. Stud. Oceanogr.*, 104878, 181–182. <https://doi.org/10.1016/j.dsr2.2020.104878>
- Fenske, K. H., Berger, A. M., Connors, B., Cope, J. M., Cox, S. P., Haltuch, M. A., Hanselman, D. H., Kapur, M., Lacko, L., Lunsford, C. R., Rodgveller, C. J., and Williams, B. (2019). *Report on the 2018 international sablefish workshop* (NOAA Tech. Memo. NMFS-AFSC-387). U.S. Dep. Commer. <https://doi.org/10.25923/sfc9-mp92>
- Fissel, B. E., Dalton, M., Garber-Yonts, B., Haynie, A., Kasperski, S., Lee, J., Lew, D., Seung, C., Sparks, K., Szymkowiak, M., and Wise, S. (2019). *Stock assessment and fishery evaluation report for the groundfish resources of the Bering Sea/Aleutian Islands regions: Economic status of the groundfish fisheries off Alaska, 2018*. North Pacific Fishery Management Council. <https://apps-afsc.fisheries.noaa.gov/refm/docs/2019/economic.pdf>
- Fissel, B. E., Dalton, M., Garber-Yonts, B., Haynie, A., Kasperski, S., Lee, J., Lew, D., Seung, C., Sparks, K., Szymkowiak, M., and Wise, S. (2021). *Stock assessment and fishery evaluation report for the groundfish resources of the Bering Sea/Aleutian Islands regions: Economic status of the groundfish fisheries off Alaska, 2019*. North Pacific Fishery Management Council. <https://apps-afsc.fisheries.noaa.gov/refm/docs/2020/econGroundfishSafe.pdf>
- Francis, C. R., Hurst, R. J., and Renwick, J. A. (2003). Quantifying annual variation in catchability for commercial and research fishing. *Fishery Bulletin, U.S.*, 101(2), 293–304. [http://sedarweb.org/docs/wsupp/S41\\_RD72\\_Francis\\_et al.2003.pdf](http://sedarweb.org/docs/wsupp/S41_RD72_Francis_et al.2003.pdf)
- Fricke, R., Eschmeyer, W. N., and Laan, R. van der. (2022). *Eschmeyer’s catalog of fishes: Genera, species, references*. <https://www.calacademy.org/scientists/projects/eschmeyers-catalog-of-fishes>
- Froese, R. (2006). Cube law, condition factor and weight-length relationships: History, meta-analysis and recommendations. *J. Appl. Ichthyol.*, 22(4), 241–253. <https://doi.org/10.1111/j.1439-0426.2006.00805.x>
- Ganz, P., and Faunce, C. H. (2019a). *Alternative sampling designs for the 2019 annual deployment plan of the north Pacific observer program* (NOAA Tech. Memo. NMFS-AFSC-394). U.S. Dep. Commer. <https://doi.org/10.25923/g9j-g434>
- Ganz, P., and Faunce, C. H. (2019b). *An evaluation of methods used to predict commercial fishing effort in Alaska* (NOAA Tech. Memo. NMFS-AFSC-395). U.S. Dep. Commer. <https://doi.org/10.25923/gnyj-f281>
- Goddard, P. D. (1997). *The effects of tow duration and subsampling on CPUE, species composition and length distribution of bottom trawl survey catches* (p. 119) [Thesis]. University of Washington.
- Grüss, A., Gao, J., Thorson, J., Rooper, C., Thompson, G., Boldt, J., and Lauth, R. (2020). Estimating synchronous changes in condition and density in eastern Bering Sea fishes. *Mar. Ecol. Prog. Ser.*, 635, 169–185. <https://doi.org/10.3354/meps13213>
- Grüss, A., Thorson, J. T., Stawitz, C. C., Reum, J. C. P., Rohan, S. K., and Barnes, C. L. (2021a). Synthesis of interannual variability in spatial demographic processes supports the strong influence of cold-pool extent on eastern Bering Sea walleye pollock (*Gadus chalcogrammus*). *Prog. Oceanogr.*, 194, 102569. <https://doi.org/10.1016/j.pocean.2021.102569>
- Grüss, A., Thorson, J. T., Stawitz, C. C., Reum, J. C. P., Rohan, S. K., and Barnes, C. L. (2021b). Synthesis of interannual variability in spatial demographic processes supports the strong influence of cold-pool extent on eastern Bering Sea walleye pollock (*Gadus chalcogrammus*). *Prog. Oceanogr.*, 194, 102569. <https://doi.org/10.1016/j.pocean.2021.102569>
- Guthrie, C. M., Nguyen, H. T., Marsh, M., and Guyon, J. R. (2020). *Genetic stock composition analysis of Chinook salmon bycatch samples from the 2018 Gulf of Alaska trawl fisheries* (NOAA Tech. Memo. NMFS-AFSC-405). U.S. Dep. Commer. <https://doi.org/10.25923/sw7t-gg49>
- Guthrie, C. M., Nguyen, H. T., Marsh, M., Watson, J. T., and Guyon, J. R. (2019). *Genetic stock composition analysis of the Chinook salmon bycatch samples from the 2017 Bering Sea trawl fisheries* (NOAA Tech. Memo. NMFS-AFSC-391). U.S. Dep. Commer. <https://doi.org/10.25923/dt1b-q428>
- Haberle, I., Bavčević, L., and Klanjscek, T. (2023). Fish condition as an indicator of stock status: Insights from condition index in a food-limiting environment. *Fish and Fisheries*, 24(4), 567–581. <https://doi.org/10.1111/faf.12744>
- Halliday, K. L., and Sassano, J. A. (1988). *Data report: 1986 bottom trawl survey of the eastern Bering*

- Sea continental shelf* (NOAA Tech. Memo. NMFS F/NWC-147; p. 147). U.S. Dep. Commer. <https://repository.library.noaa.gov/view/noaa/23347>
- Hamazaki, T., Fair, L., Watson, L., and Brennan, E. (2005). Analyses of Bering Sea bottom-trawl surveys in norton sound: Absence of regime shift effect on epifauna and demersal fish. *ICES J. Mar. Sci.*, 62(8), 1597–1602. <https://doi.org/10.1016/j.icesjms.2005.06.003>
- Helker, V. T., Allen, B. M., and Jemison, L. A. (2015). *Human-caused injury and mortality of NMFS-managed Alaska marine mammal stocks, 2009-2013* (NOAA Tech. Memo. NMFS-AFSC-300). U.S. Dep. Commer. <https://doi.org/10.7289/V50G3H3M>
- Helker, V. T., Muto, M., and Jemison, L. A. (2016). *Human-caused injury and mortality of NMFS-managed Alaska marine mammal stocks, 2010-2014* (NOAA Tech. Memo. NMFS-AFSC-315). U.S. Dep. Commer. <https://repository.library.noaa.gov/view/noaa/9078>
- Helker, V. T., Muto, M., Savage, K., Teerlink, S. F., Jemison, L. A., Wilkinson, K. M., and Jannot, J. E. (2017). *Human-caused mortality and injury of NMFS-managed Alaska marine mammal stocks, 2011-2015* (NOAA Tech. Memo. NMFS-AFSC-354). U.S. Dep. Commer. <https://doi.org/10.7289/v5/tm-afsc-354>
- Helker, V. T., Muto, M., Savage, K., Teerlink, S. F., Jemison, L. A., Wilkinson, K., and Jannot, J. E. (2019). *Human-caused mortality and injury of NMFS-managed Alaska marine mammal stocks, 2012-2016* (NOAA Tech. Memo. NMFS-AFSC-392). U.S. Dep. Commer. <https://doi.org/10.25923/H8W7-JZ68>
- Hoff, G. R. (2016). *Results of the 2016 eastern Bering Sea upper continental slope survey of groundfishes and invertebrate resources* (NOAA Tech. Memo. NOAA-AFSC-339). U.S. Dep. Commer. <https://doi.org/10.7289/V5/TM-AFSC-339>
- Hoff, G. R., and Britt, L. L. (2011). *Results of the 2010 eastern Bering Sea upper continental slope survey of groundfish and invertebrate resources* [NOAA Tech. Rep.]. U.S. Dep. Commer. <https://apps-afsc.fisheries.noaa.gov/Publications/AFSC-TM/NOAA-TM-AFSC-227.pdf>
- Hollowed, A. B., Angliss, R. P., Sigler, M. F., Megrey, B. A., and Ito, D. H. (2007). Implementation plan for loss of sea ice (LOSI) program. In *AFSC Processed Rep.* (2007-05; p. 48). U.S. Dep. Commer. <https://repository.library.noaa.gov/view/noaa/8607>
- Hunt, G. L., Jr., Coyle, K. O., Eisner, L. B., Farley, E. V., Heintz, R. A., Mueter, F., Napp, J. M., Overland, J. E., Ressler, P. H., and Salo, S. (2011). Climate impacts on eastern Bering Sea foodwebs: A synthesis of new data and an assessment of the oscillating control hypothesis. *ICES J. Mar. Sci.*, 68(6), 1230–1243. <https://doi.org/10.1093/icesjms/fsr036>
- Hurst, T. P., O’Leary, C. A., Rohan, S. K., Siddon, E. C., Thorson, J. T., and Vollenweider, J. J. (2021). *Inventory, management uses, and recommendations for fish and crab condition information from the 2021 AFSC Condition Congress* (AFSC Processed Rep. AFSC Processed Rep. 2021-04). Alaska Fisheries Science Center, NOAA, National Marine Fisheries Service, 7600 Sand Point Way NE, Seattle, WA 98115. <https://doi.org/10.25923/p1yd-0793>
- Ianelli, J. N., Honkalehto, T., Barbeaux, S. J., Fissel, B. E., and Kotwicki, S. (2016). *Stock assessment and fishery evaluation report for the groundfish resources of the Bering Sea/Aleutian Islands regions*. <https://apps-afsc.fisheries.noaa.gov/REFM/Docs/2016/BSAIntro.pdf>
- Ianelli, J. N., Kotwicki, S., Honkalehto, T., Holsman, K., and Fissel, B. E. (2017). *NPFMC Bering Sea and Aleutian Islands SAFE* (pp. 55–184). North Pacific Fishery Management Council.
- Jefferson, T. A., Dahlheim, M. E., Zerbini, A. N., Waite, J. M., and Kennedy, A. S. (2019). *Abundance and seasonality of Dall’s porpoise (Phocoenoides dalli) in southeast Alaska*. <https://doi.org/10.25923/ARTS-R887>
- Kearney, K. A. (2019). *Freshwater input to the Bering Sea, 1950–2017*. <https://doi.org/10.25923/VCJ6-H740>
- Knight, C. A., Cheng, C. C., and DeVries, A. L. (1991). Adsorption of alpha-helical antifreeze peptides on specific ice crystal surface planes. *Biophysical Journal*, 59(2), 409–418. [https://doi.org/10.1016/s0006-3495\(91\)82234-2](https://doi.org/10.1016/s0006-3495(91)82234-2)
- Kotwicki, S., Buckley, T. W., Honkalehto, T., and Walters, G. (2005). Variation in the distribution of walleye pollock (*Theragra chalcogramma*) with temperature and implications for seasonal migration. *Fish. Bull.*, 103(4), 574–587. <https://spo.nmfs.noaa.gov/content/variation-distribution-walleye-pollock-theragra-chalcogramma-temperature-and-implications>
- Kotwicki, S., Horne, J. K., Punt, A. E., and Ianelli, J. N. (2015). Factors affecting the availability of walleye pollock to acoustic and bottom trawl survey gear. *ICES J. Mar. Sci.*, 72(5), 1425–1439. <https://doi.org/10.1016/j.icesjms.2015.06.003>

- [//doi.org/10.1093/icesjms/fsv011](https://doi.org/10.1093/icesjms/fsv011)
- Kotwicki, S., Ianelli, J. N., and Punt, A. E. (2014). Correcting density-dependent effects in abundance estimates from bottom-trawl surveys. *ICES J. Mar. Sci.*, 71(5), 1107–1116. <https://doi.org/10.1093/icesjms/fst208>
- Kotwicki, S., and Lauth, R. R. (2013). Detecting temporal trends and environmentally-driven changes in the spatial distribution of bottom fishes and crabs on the eastern Bering Sea shelf. *Deep-Sea Res. II*, 94, 231–243. <https://doi.org/10.1016/j.dsr2.2013.03.017>
- Kotwicki, S., Lauth, R. R., Williams, K., and Goodman, S. E. (2017). Selectivity ratio: A useful tool for comparing size selectivity of multiple survey gears. *Fisheries Research*, 191, 76–86. <https://doi.org/10.1016/j.fishres.2017.02.012>
- Kotwicki, S., and Ono, K. (2019). The effect of random and density-dependent variation in sampling efficiency on variance of abundance estimates from fishery surveys. *Fish and Fisheries*, 20, 760–774. <https://doi.org/10.1111/faf.12375>
- Laman, E. A., Pirtle, J. L., Harris, J., Siple, M. C., Rooper, C. N., Hurst, T. P., and L., C. C. (2022). *Advancing model-based essential fish habitat descriptions for north pacific species in the Bering Sea* (NOAA Tech. Memo. NMFS-AFSC-459; pp. 538 p.). U.S. Dep. Commer. <https://doi.org/10.25923/y5gc-nk42>
- Lang, C. A., Richar, J. I., and Foy, R. J. (2018a). *The 2017 eastern Bering Sea continental shelf and northern Bering Sea bottom trawl surveys: Results for commercial crab species* (NOAA Tech. Memo. NMFS-AFSC-372). U.S. Dep. Commer. <https://repository.library.noaa.gov/view/noaa/17434>
- Lang, C. A., Richar, J. I., and Foy, R. J. (2018b). *The 2018 eastern Bering Sea continental shelf trawl survey: Results for commercial crab species* (NOAA Tech. Memo. NMFS-AFSC-386; pp. 220 p.). U.S. Dep. Commer. <https://doi.org/10.25923/x2fk-cj60>
- Lang, C. A., Richar, J. I., and Foy, R. J. (2019). *The 2018 eastern Bering Sea continental shelf and northern Bering Sea trawl surveys: Results for commercial crab species* (NOAA Tech. Memo. NMFS-AFSC-386). U.S. Dep. Commer. <https://doi.org/10.25923/X2FK-CJ60>
- Lauth, R. R. (2011). *Results of the 2010 eastern and northern Bering Sea continental shelf bottom trawl survey of groundfish and invertebrate fauna* (NOAA Tech. Memo. NMFS-AFSC-227). U.S. Dep. Commer. <https://apps-afsc.fisheries.noaa.gov/Publications/AFSC-TM/NOAA-TM-AFSC-227.pdf>
- Lauth, R. R., Dawson, E. J., and Conner, J. (2019). *Results of the 2017 eastern and northern Bering Sea continental shelf bottom trawl survey of groundfish and invertebrate fauna* (NOAA Tech. Memo. NMFS-AFSC-396). U.S. Dep. Commer. <https://doi.org/10.25923/H118-NW41>
- Lauth, R. R., and Kotwicki, S. (2014). *A calibration function for correcting mean net spread values obtained from marport spread sensors used in conjunction with the Marport MK II receiver* (AFSC Processed Rep. NMFS-AFSC-2014-02). U.S. Dep. Commer. <https://apps-afsc.fisheries.noaa.gov/Publications/ProcRpt/PR2014-02.pdf>
- Lindeberg, M. R., and Lindstrom, S. C. (2019). *Assessment and catalog of benthic marine algae from the Alaska peninsula, may 2016* (NOAA Tech. Memo. NMFS-AFSC-389). U.S. Dep. Commer. <https://doi.org/10.25923/3YWS-KG16>
- Markowitz, E. H., Dawson, E. J., Anderson, A. B., Rohan, S. K., Charriere, N. E., Prohaska, B. K., and Stevenson, D. E. (2023). *Results of the 2022 eastern and northern Bering Sea continental shelf bottom trawl survey of groundfish and invertebrate fauna* (NOAA Tech. Memo. NMFS-AFSC-469; p. 213). U.S. Dep. Commer. <https://doi.org/10.25923/rt50-th19>
- Markowitz, E. H., Dawson, E. J., Anderson, C., Charriere, N. E., Richar, J. I., Rohan, S. K., Prohaska, B. K., Haehn, R. A., and Stevenson, D. E. (2022). *2022 northern Bering Sea groundfish and crab trawl survey highlights* [Outreach]. University of Alaska Fairbanks Strait Science Seminar; <https://www.youtube.com/watch?v=TGXN2pIDhfc>.
- Markowitz, E. H., Dawson, E. J., Charriere, N. E., Prohaska, B. K., Rohan, S. K., Haehn, R. A., Stevenson, D. E., and Britt, L. L. (2022). *Results of the 2018 eastern Bering Sea continental shelf bottom trawl survey of groundfish and invertebrate fauna* (NOAA Tech. Memo. NMFS-AFSC-450; p. 183). U.S. Dep. Commer. <https://doi.org/10.25923/m4pw-t510>
- Markowitz, E. H., Dawson, E. J., Charriere, N. E., Prohaska, B. K., Rohan, S. K., Stevenson, D. E., and Britt, L. L. (2022a). *Results of the 2019 eastern and northern Bering Sea continental shelf bottom trawl survey of groundfish and invertebrate fauna* (NOAA Tech. Memo. NMFS-AFSC-451; p. 225). U.S. Dep. Commer. <https://doi.org/10.25923/d641-xb21>

- Markowitz, E. H., Dawson, E. J., Charriere, N. E., Prohaska, B. K., Rohan, S. K., Stevenson, D. E., and Britt, L. L. (2022b). *Results of the 2021 eastern and northern Bering Sea continental shelf bottom trawl survey of groundfish and invertebrate fauna* (NOAA Tech. Memo. NMFS-AFSC-452; p. 227). U.S. Dep. Commer. <https://doi.org/10.25923/g1ny-y360>
- Markowitz, E. H., Dawson, E. J., Wassermann, S., Anderson, A. B., Rohan, S. K., Charriere, B. K., and Stevenson, D. E. (2024). *Results of the 2023 eastern and northern Bering Sea continental shelf bottom trawl survey of groundfish and invertebrate fauna* (NOAA Tech. Memo. NMFS-AFSC-487; p. 242). U.S. Dep. Commer. <https://doi.org/10.25923/2mry-yx09>
- McGilliard, C. R., Nichol, D. G., and Palsson, W. A. (2016). *NPFMC Bering Sea and Aleutian Islands SAFE* (p. 176). North Pacific Fishery Management Council. <https://repository.library.noaa.gov/view/noaa/17487>
- McGilliard, C. R., Nichol, D. G., and Palsson, W. A. (2018). North Pacific Fishery Management Council. <https://www.fisheries.noaa.gov/resource/data/2019-assessment-flathead-sole-bering-flounder-stock-bering-sea-and-aleutian-islands>
- Mecklenburg, C. W., Mecklenburg, T. A., and Thorsteinson, L. K. (2002). *Fishes of Alaska*.
- Miller, T. J. (2013). A comparison of hierarchical models for relative catch efficiency based on paired-gear data for US Northwest Atlantic fish stocks. *Canadian Journal of Fisheries and Aquatic Sciences*, 70(9), 1306–1316. <https://doi.org/10.1139/cjfas-2013-0136>
- Muto, M. M., Helker, V. T., Delean, B. J., Angliss, R. P., Boveng, P. L., Breiwick, J. M., Brost, B. M., Cameron, M. F., Clapham, P. J., Dahle, S. P., Dahlheim, M. E., Fadely, B. S., Ferguson, M. C., Fritz, L. W., Hobbs, R. C., Ivashchenko, Y. V., Kennedy, A. S., London, J. M., Mizroch, S. A., . . . Zerbini, A. N. (2020). *Alaska marine mammal stock assessments, 2019* (NOAA Tech. Memo. NMFS-AFSC-404). U.S. Dep. Commer. <https://doi.org/10.25923/9C3R-XP53>
- Nichol, D. G. (1995a). *Proceedings of the international flatfish symposium on north pacific flatfish* [Conference Proceedings]. 35–50.
- Nichol, D. G. (1995b). Spawning and maturation of female yellowfin sole in the eastern Bering Sea. *Proceedings of the International Flatfish Symposium; October 1994, Anchorage, Alaska*, 35–50.
- Nichol, D. G. (1997). Effects of geography and bathymetry on growth and maturity of yellowfin sole, *Pleuronectes asper*, in the eastern Bering Sea. *Ocean. Lit. Rev.*, 12(44), 1548. <https://spo.nmfs.noaa.gov/sites/default/files/pdf-content/1997/953/nichol.pdf>
- Nichol, D. G. (1998). Annual and between-sex variability of yellowfin sole, *Pleuronectes asper*. *Fish. Bull.*, 96, 547–561. <https://spo.nmfs.noaa.gov/content/annual-and-between-sex-variability-yellowfin-sole-pleuronectes-aspe-spring-summer>
- Nichol, D. G., Kotwicki, S., Wilderbuer, T. K., Lauth, R. R., and Ianelli, J. N. (2019). Availability of yellowfin sole (*Limanda aspera*) to the eastern Bering Sea trawl survey and its effect on estimates of survey biomass. *Fish. Res.*, 211, 319–330. <https://doi.org/10.1016/j.fishres.2018.11.017>
- Nichol, D. G., and Somerton, D. A. (2009). Evidence of the selection of tidal streams by northern rock sole (*Lepidopsetta polyxystra*) for transport in the eastern Bering Sea. *Fish. Bull.*, 107(2), 221–234.
- Nielsen, J. K., Bryan, D. R., Rand, K. M., Arostegui, M. C., Braun, C. D., Galuardi, B., and McDermott, S. F. (2023). Geolocation of a demersal fish (Pacific cod) in a high-latitude island chain (Aleutian Islands, Alaska). *Anim. Biotelemetry*, 11(29), 22. <https://doi.org/10.1186/s40317-023-00340-3>
- Nielsen, J. K., McDermott, S., Levy, C., Rand, K., and Dawson, E. J. (2023). *Seasonal and annual movement patterns of pacific cod in Alaska indicate connectivity between management areas* [Presentation]. Western Groundfish Conference.
- Nielsen, J. K., McDermott, S., Rand, K., Dawson, E. J., Bryan, D., Britt, L. L., Kotwicki, S., and Nichol, D. (In review). *Insights into the northward shift of Pacific cod in warming Bering Sea waters from pop-up satellite archival tags*.
- NOAA Fisheries. (2023). *Distribution mapping and analysis portal (DisMAP) data records*. <https://apps-st.fisheries.noaa.gov/dismap/>; U.S. Dep. Commer.
- NOAA Fisheries Alaska Fisheries Science Center. (2024). *Fisheries one stop shop public data: RACE division bottom trawl survey data query*. <https://www.fisheries.noaa.gov/foss>; U.S. Dep. Commer.
- NOAA Fisheries Alaska Fisheries Science Center, Groundfish Assessment Program. (2024). *AFSC groundfish assessment program design-based production data*. <https://www.fisheries.noaa.gov/alaska/science-data/groundfish-assessment-program-bottom-trawl-surveys>; U.S. Dep. Commer.

- O’Leary, C. A., DeFilippo, L. V., Thorson, J. T., Kotwicki, S., Hoff, G. R., Kulik, V. V., Ianelli, J. N., and Punt, A. E. (2022). Understanding transboundary stocks’ availability by combining multiple fisheries-independent surveys and oceanographic conditions in spatiotemporal models. *ICES J. Mar. Sci.*, 79, 1063–1074. <https://doi.org/10.1093/icesjms/fsac046>
- Oke, K. B., Mueter, F. J., and Litzow, M. A. (2022). Warming leads to opposite patterns in weight-at-age for young versus old age classes of Bering Sea walleye pollock. *Can. J. Fish. Aquat. Sci.* <https://doi.org/10.1139/cjfas-2021-0315>
- Paul, A. J., and Paul, J. M. (1999). Interannual and regional variations in body length, weight and energy content of age-0 Pacific herring from Prince William Sound, Alaska. *J. Fish Biol.*, 54(5), 996–1001. <https://doi.org/10.1006/jfbi.1999.0927>
- Pereyra, W. T., Reeves, J. E., and Bakkala, R. G. (1976). *Demersal fish and shellfish resources of the eastern Bering Sea in the baseline year 1975* [NOAA Processed Rep.]. U.S. Dep. Commer. [https://repository.library.noaa.gov/view/noaa/5391/noaa\\_5391\\_DS1.pdf?](https://repository.library.noaa.gov/view/noaa/5391/noaa_5391_DS1.pdf?)
- Rand, K., Dowlin, A., Levy, C., McDermott, S., Nielsen, J., Prohaska, B., and Rohan, S. (2024). *Pacific cod ((Gadus macrocephalus)) workshop – field efforts and current research 2023* (AFSC Processed Report 2024-05; p. 53). U.S. Dep. Commer. <https://doi.org/10.25923/x8dm-0d73>
- Resource Assessment, A. F. S. C. (U.S.), and Division, C. E. (2017). *Groundfish survey species, data, and forms code manual*. U.S. Dep. Commer. <https://www.fisheries.noaa.gov/resource/document/groundfish-survey-species-code-manual-and-data-codes-manual>
- Resource Assessment, A. F. S. C. (U.S.), and Division, C. E. (2021). *Groundfish survey data codes and forms*. <https://doi.org/10.25923/kp5e-1g02>
- Resource Assessment, A. F. S. C. (U.S.), and Division, C. E. (2023a). *2023 groundfish survey data codes and forms*. <https://doi.org/10.25923/58c2-w627>
- Resource Assessment, A. F. S. C. (U.S.), and Division, C. E. (2023b). *2023 groundfish survey species code manual*. <https://doi.org/10.25923/e95d-q341>
- Rodgveller, C. J. (2019). The utility of length, age, liver condition, and body condition for predicting maturity and fecundity of female sablefish. *Fish. Res.*, 216(October 2018), 18–28. <https://doi.org/10.1016/j.fishres.2019.03.013>
- Rohan, S. K., Nielsen, J. K., Prohaska, B. K., De Robertis, A., Lewis, S. G., and McDermott, S. F. (2024). Characterizing behavioral responses of Pacific cod to bottom trawl vessels and gear using archival tag accelerometer data. In *Fish. Res.* (107033; Vol. 275). Elsevier. <https://doi.org/10.1016/j.fishres.2024.107033>
- Rohan, S., Barnett, L., and Charriere, N. (2022). *Evaluating approaches to estimating mean temperatures and cold pool area from AFSC bottom trawl surveys of the eastern Bering Sea* (NOAA Tech. Memo. NMFS-AFSC-456; p. 42). U.S. Dep. Commer. <https://doi.org/10.25923/1wwh-q418>
- Rose, C. S., and Walters, G. E. (1990). *Proceedings of the symposium on application of stock assessment techniques applies to gadids* [Conference Proceedings]. 50, 57–67.
- Ruzicka, J., Brodeur, R. D., Cieciel, K., and Decker, M. B. (2020). Examining the ecological role of jellyfish in the eastern Bering Sea. *ICES J. Mar. Sci.*, 77(2), 791–802. <https://doi.org/10.1093/icesjms/fsz244>
- Shotwell, S. K., Bryan, M., Hanselman, D. H., Markowitz, E. H., Siddon, E., Spies, I., and Sullivan, J. (2022). *NPFMC Bering Sea and Aleutian Islands SAFE*. North Pacific Fishery Management Council. [https://apps-afsc.fisheries.noaa.gov/Plan\\_Team/2022/BSAIatf.pdf](https://apps-afsc.fisheries.noaa.gov/Plan_Team/2022/BSAIatf.pdf)
- Shotwell, S. K., Sullivan, J., Echave, K., Markowitz, E. H., Ortiz, I., Siddon, E., Spencer, P., and Spies, I. (2022). *NPFMC Bering Sea and Aleutian Islands SAFE*. North Pacific Fishery Management Council. <https://www.fisheries.noaa.gov/resource/data/2022-assessment-shortraker-rockfish-stock-bering-sea-and-aleutian-islands>
- Shubnikov, D. A., and Lisovenko, L. A. (1964). Data on the biology of rock sole of the southeastern Bering Sea. *Soviet Fisheries Investigations in the Northeast Pacific*, 2, 220–226.
- Sigler, M. F., Aydin, K. Y., Boveng, P. L., Farley, E. V., Jr., Heintz, R. A., and Lauth, R. R. (2015). Alaska fisheries science center loss of sea ice (LOSI) plan for FY15-FY19. In *NOAA Processed Rep.* (2015-01; p. 11). U.S. Dep. Commer. <https://apps-afsc.fisheries.noaa.gov/Publications/ProcRpt/PR2015-01.pdf>
- Siple, M. C., Szalay, P. G. von, Raring, N. W., Dowlin, A. N., and Riggle, B. C. (2024). *Data report: 2023 gulf of alaska bottom trawl survey* (NOAA Tech. Memo. AFSC processed report; 2024-09). U.S. Dep. Commer. <https://doi.org/10.25923/gbb1-x748>

- Smith, G. B., and Bakkala, R. G. (1982). *Demersal fish resources of the eastern Bering Sea: Spring 1976* [NOAA Tech. Rep.]. NMFS-SSRF-754, 129 p. <https://spo.nmfs.noaa.gov/content/demersal-fish-resources-eastern-bering-sea-spring-1976>
- Sohn, D., Ciannelli, L., and Duffy-Anderson, J. T. (2010). Distribution and drift pathways of Greenland halibut (*Reinhardtius hippoglossoides*) during early life stages in the eastern Bering Sea and Aleutian Islands. *Fish. Oceanogr.*, 19(5), 339–353. <https://doi.org/10.1111/j.1365-2419.2010.00549.x>
- Somerton, D. A., and Otto, R. S. (1999). Net efficiency of a survey trawl for snow crab, *Chionoecetes opilio*, and tanner crab, *Chionoecetes bairdi*. *Fishery Bulletin*, 97(3), 617–625.
- Somerton, D. A., Otto, R. S., and Syrjala, S. E. (2002). Can changes in tow duration on bottom trawl surveys lead to changes in CPUE and mean size? *Fisheries Research*, 55(1-3), 63–70.
- Spencer, P. D. (2008). Density-independent and density-dependent factors affecting temporal changes in spatial distributions of eastern Bering Sea flatfish. *Fish. Oceanogr.*, 17(5), 396–410. <https://doi.org/10.1111/j.1365-2419.2008.00486.x>
- Spies, I., Barnett, L., R., H., Ianelli, J., Markowitz, E. H., Oyafuso, Z., Siddon, E., and Yeung, C. (2022). North Pacific Fishery Management Council. [https://apps-afsc.fisheries.noaa.gov/Plan\\_Team/2022/BSAIyfin.pdf](https://apps-afsc.fisheries.noaa.gov/Plan_Team/2022/BSAIyfin.pdf)
- Spies, I., Gruenthal, K. M., Drinan, D. P., Hollowed, A. B., Stevenson, D. E., Tarpey, C. M., and Hauser, L. (2020). Genetic evidence of a northward range expansion in the eastern Bering Sea stock of Pacific cod. *Evol. Appl.*, 13(2), 362–375. <https://doi.org/10.1111/eva.12874>
- Spies, I., R., H., Siddon, E., Conner, J., Markowitz, E. H., Yeung, C., and Ianelli, J. (2021). *NPFMC Bering Sea and Aleutian Islands SAFE*. North Pacific Fishery Management Council. <https://www.fisheries.noaa.gov/resource/data/2021-assessment-yellowfin-sole-stock-bering-sea-and-aleutian-islands>
- Spies, I., Wilderbuer, T. K., Nichol, D. G., and Aydin, K. (2011). *Stock assessment and fishery evaluation report for the groundfish resources of the Bering Sea/Aleutian Islands regions*. North Pacific Fishery Management Council.
- Spies, I., Wilderbuer, T. K., Nichol, D. G., Hoff, J., and Palsson, W. (2018). *Stock assessment and fishery evaluation report for the groundfish resources of the Bering Sea/Aleutian Islands regions*. North Pacific Fishery Management Council.
- Stabeno, P. J., and Bell, S. W. (2019). Extreme conditions in the Bering Sea (2017–2018): Record-breaking low sea-ice extent. *Geophys. Res. Lett.*, 46, 8952–8959. <https://doi.org/10.1029/2019GL083816>
- Stabeno, P. J., Bond, N. A., Kachel, N. B., Salo, S. A., and Schumacher, J. D. (2001). On the temporal variability of the physical environment over the south-eastern Bering Sea. *Fish. Oceanogr.*, 10(1), 81–98. <https://doi.org/10.1046/j.1365-2419.2001.00157.x>
- Stabeno, P. J., Farley, E. V., Kachel, N. B., Moore, S., Mordy, C. W., Napp, J. M., Overland, J. E., Pinchuk, A. I., and Sigler, M. F. (2012). A comparison of the physics of the northern and southern shelves of the eastern Bering Sea and some implications for the ecosystem. *Deep-Sea Res. II*, 65, 14–30. <https://doi.org/10.1016/j.dsr2.2012.02.019>
- Stabeno, P. J., Kachel, N. B., Moore, S. E., Napp, J. M., Sigler, M., Yamaguchi, A., and Zerbini, A. N. (2012). Comparison of warm and cold years on the southeastern Bering Sea shelf and some implications for the ecosystem. *Deep-Sea Res. II*, 65, 31–45. <https://doi.org/10.1016/j.dsr2.2012.02.020>
- Stauffer, G. D. (compiler). (2004). *NOAA protocols for groundfish bottom trawl surveys of the nation's fishery resources, march 16, 2003* (NOAA Tech. Memo. NMFS-SPO-65; p. 205). U.S. Dep. Commer. <https://spo.nmfs.noaa.gov/content/tech-memo/noaa-protocols-groundfish-bottom-trawl-surveys-nations-fishery-resources-march-16>
- Stevens, B. G., and MacIntosh, R. A. (1990). *Report to industry on the 1990 eastern Bering Sea crab survey* (NWAFC Processed Rep. NOAA-NWAFC-90-09). U.S. Dep. Commer. [https://repository.library.noaa.gov/view/noaa/23104/noaa\\_23104\\_DS1.pdf](https://repository.library.noaa.gov/view/noaa/23104/noaa_23104_DS1.pdf)
- Stevenson, D. E. (2015). The validity of nominal species of (*Malacocottus*) (Teleostei: Cottiformes: Psychrolutidae) known from the eastern North Pacific with a key to the species. *Copeia*, 103, 22–33. <https://doi.org/10.1643/CI-14-074>
- Stevenson, D. E., and Hoff, G. R. (2009). *Species identification confidence in the eastern Bering Sea shelf survey (1982-2008)* (AFSC Processed Rep. NOAA-AFSC-2009-04). U.S. Dep. Commer. <https://repository.library.noaa.gov/view/noaa/11979>
- Stevenson, D. E., Kotwicki, S., Thorson, J. T., Correa, G. M., and Buckley, T. (2022). The influence of

- age and cohort on the distribution of walleye pollock (*Gadus chalcogrammus*) in the eastern Bering Sea. *Can. J. Fish. Aquat. Sci.*, 79, 1934–1949. <https://doi.org/10.1139/cjfas-2021-0300>
- Stevenson, D. E., and Lauth, R. R. (2012). Latitudinal trends and temporal shifts in the catch composition of bottom trawls conducted on the eastern Bering Sea shelf. *Deep-Sea Res. II*, 65, 251–259. <https://doi.org/10.1016/j.dsr2.2012.02.021>
- Stevenson, D. E., and Lauth, R. R. (2019). Bottom trawl surveys in the northern Bering Sea indicate recent shifts in the distribution of marine species. *Polar Biol.*, 42(2), 407–421. <https://doi.org/10.1007/s00300-018-2431-1>
- Stevenson, D. E., Markowitz, E. H., Dawson, E. J., Charriere, N. E., Prohaska, B. K., Rohan, S. K., and Britt, L. L. (2021). *Results of the 2021 eastern and northern Bering Sea continental shelf bottom trawl survey of groundfish and invertebrate fauna*. [https://meetings.npfmc.org/CommentReview/DownloadFile?p=02e397c4-a1cc-46eb-b2ae-1c3cc368e682.pdf&fileName=2022\\_EBSSurvey\\_planteam.pdf](https://meetings.npfmc.org/CommentReview/DownloadFile?p=02e397c4-a1cc-46eb-b2ae-1c3cc368e682.pdf&fileName=2022_EBSSurvey_planteam.pdf); North Pacific Fishery Management Council.
- Stevenson, D. E., Markowitz, E. H., Dawson, E. J., Charriere, N. E., Prohaska, B. K., Rohan, S. K., and Britt, L. L. (2022). *Results of the 2022 eastern and northern Bering Sea continental shelf bottom trawl survey of groundfish and invertebrate fauna*. [https://meetings.npfmc.org/CommentReview/DownloadFile?p=02e397c4-a1cc-46eb-b2ae-1c3cc368e682.pdf&fileName=2022\\_EBSSurvey\\_planteam.pdf](https://meetings.npfmc.org/CommentReview/DownloadFile?p=02e397c4-a1cc-46eb-b2ae-1c3cc368e682.pdf&fileName=2022_EBSSurvey_planteam.pdf); North Pacific Fishery Management Council.
- Stevenson, D. E., and Sheiko, B. A. (2009). Clarification of the (*Lycodes diapterus*) species complex (perciformes: Zoarcidae), with comments on the subgenus (*Furcimanus*). *Copeia*, 125–137. <https://doi.org/10.1643/CI-08-069>
- Stevenson, D. E., Weinberg, K. L., and Lauth, R. R. (2016). *Estimating confidence in trawl efficiency and catch quantification for the eastern Bering Sea Shelf survey* (NOAA Tech. Memo. NMFS-AFSC-335; p. 51). U.S. Dep. Commer. <https://doi.org/10.7289/V5/TM-AFSC-335>
- Stewart, I. J., and Martell, S. J. D. (2015). Reconciling stock assessment paradigms to better inform fisheries management. *ICES J. Mar. Sci.*, 72, 2187–2196. <https://doi.org/10.1093/icesjms/fsv061>
- Stewart, I. J., and Monnahan, C. C. (2014). Overview of data sources for the Pacific halibut stock assessment and related analyses. *International Northern Pacific Fisheries Communication Report of Assessment and Research Activities*, 2013, 95–168.
- Sullivan, J. Y., and Faunce, C. H. (2018). *Alternative sampling designs for the 2018 annual deployment plan of the north Pacific observer program* (NOAA Tech. Memo. NMFS-AFSC-364). U.S. Dep. Commer. <https://doi.org/10.7289/V5/TM-AFSC-364>
- TenBrink, T. T. (2022). Delineating yellowfin sole (*Limanda aspera*) reproduction in the northern Bering Sea provides information across the eastern Bering Sea continental shelf. *Fish. Res.*, 252, 106335. <https://doi.org/10.1016/j.fishres.2022.106335>
- The Plan Team for the Groundfish Fisheries of the Bering Sea and Aleutian Islands. *Stock assessment and fishery evaluation report for the groundfish resources of the Bering Sea/Aleutian Islands regions*. North Pacific Fishery Management Council. <https://www.fisheries.noaa.gov/alaska/population-assessments/north-pacific-groundfish-stock-assessments-and-fishery-evaluation>
- The Plan Team for the Groundfish Fisheries of the Bering Sea and Aleutian Islands. (2017). *Stock assessment and fishery evaluation report for the groundfish resources of the Bering Sea/Aleutian Islands regions*. North Pacific Fishery Management Council. <https://www.fisheries.noaa.gov/alaska/population-assessments/north-pacific-groundfish-stock-assessments-and-fishery-evaluation>
- The Plan Team for the Groundfish Fisheries of the Bering Sea and Aleutian Islands. (2018). *Stock assessment and fishery evaluation report for the groundfish resources of the Bering Sea/Aleutian Islands regions*. North Pacific Fishery Management Council. <https://www.fisheries.noaa.gov/alaska/population-assessments/north-pacific-groundfish-stock-assessments-and-fishery-evaluation>
- The Plan Team for the Groundfish Fisheries of the Bering Sea and Aleutian Islands. (2019). *Stock assessment and fishery evaluation report for the groundfish resources of the Bering Sea/Aleutian Islands regions*. North Pacific Fishery Management Council. <https://www.fisheries.noaa.gov/alaska/population-assessments/north-pacific-groundfish-stock-assessments-and-fishery-evaluation>
- The Plan Team for the Groundfish Fisheries of the Bering Sea and Aleutian Islands. (2020). *Stock assessment and fishery evaluation report for the groundfish resources of the Bering Sea/Aleutian Islands regions*. North Pacific Fishery Management Council. <https://www.fisheries.noaa.gov/alaska/population-assessments/north-pacific-groundfish-stock-assessments-and-fishery-evaluation>

- assessments/north-pacific-groundfish-stock-assessments-and-fishery-evaluation
- The Plan Team for the Groundfish Fisheries of the Bering Sea and Aleutian Islands. (2021). *Stock assessment and fishery evaluation report for the groundfish resources of the Bering Sea/Aleutian Islands regions*. North Pacific Fishery Management Council. <https://www.fisheries.noaa.gov/alaska/population-assessments/north-pacific-groundfish-stock-assessments-and-fishery-evaluation>
- The Plan Team for the Groundfish Fisheries of the Bering Sea and Aleutian Islands. (2022a). *Stock assessment and fishery evaluation report for the groundfish resources of the Bering Sea/Aleutian Islands regions*. North Pacific Fishery Management Council. <https://www.fisheries.noaa.gov/alaska/population-assessments/north-pacific-groundfish-stock-assessments-and-fishery-evaluation>
- The Plan Team for the Groundfish Fisheries of the Bering Sea and Aleutian Islands. (2022b). *Stock assessment and fishery evaluation report for the king and tanner crab fisheries of the Bering Sea and Aleutian Islands regions*. North Pacific Fishery Management Council. <https://meetings.npfmc.org/CommentReview/DownloadFile?p=c0a7a6cc-fed5-4369-a441-b487db9bd60f.pdf&fileName=BSAI%20Crab%20SAFE%202022%20Introduction.pdf>
- Thompson, G. G. (2018). *Stock assessment and fishery evaluation report for the groundfish resources of the Bering Sea/Aleutian Islands regions* (pp. 386 p.). North Pacific Fishery Management Council.
- Thorson, J. T. (2019). Guidance for decisions using the Vector Autoregressive Spatio-Temporal (VAST) package in stock, ecosystem, habitat and climate assessments. *Fish. Res.*, 210, 143–161. <https://doi.org/10.1016/j.fishres.2018.10.013>
- Thorson, J. T., Ciannelli, L., and Litzow, M. A. (2020). Defining indices of ecosystem variability using biological samples of fish communities: A generalization of empirical orthogonal functions. *Prog. Oceanogr.*, 181, 102244. <https://doi.org/10.1016/j.pocean.2019.102244>
- Vestfals, C. D., Ciannelli, L., and Hoff, G. R. (2016). Changes in habitat utilization of slope-spawning flatfish across a bathymetric gradient. *ICES J. Mar. Sci.*, 73(7), 1875–1889. <https://doi.org/10.1093/icesjms/fsw112>
- Von Szalay, P. G., and Raring, N. W. (2018). *Data report: 2017 Gulf of Alaska bottom trawl survey* (NOAA Tech. Memo. NMFS-AFSC-374). U.S. Dep. Commer. <https://doi.org/10.7289/V5/TM-AFSC-374>
- Von Szalay, P. G., and Raring, N. W. (2020). *Data report: 2018 Aleutian Islands bottom trawl survey* (NOAA Tech. Memo. NMFS-AFSC-409). U.S. Dep. Commer. <https://doi.org/10.25923/qe5v-fz70>
- Von Szalay, P. G., Raring, N. W., Siple, M. C., Dowlin, A. N., Riggle, B. C., and Laman, E. A. and. (2023). *Data report: 2022 Aleutian Islands bottom trawl survey* (AFSC Processed Rep. 2023-07; p. 230). U.S. Dep. Commer. <https://doi.org/10.25923/85cy-g225>
- Wakabayashi, K. R., Bakkala, G., and Alton, M. S. (1985). Results of cooperative U.S.-Japan groundfish investigations in the Bering Sea during May-August 1979. In R. G. Bakkala and K. Wakabayashi (Eds.), *International North Pacific Fisheries Commission Bulletin* (Vol. 44, pp. 7–29). International North Pacific Fisheries Commission.
- Webster, R. A., Soderlund, E., Dykstra, C. L., and Stewart, I. J. (2020). Monitoring change in a dynamic environment: Spatiotemporal modelling of calibrated data from different types of fisheries surveys of pacific halibut. *Canadian Journal of Fisheries and Aquatic Sciences*, 77(8), 1421–1432. <https://doi.org/10.1139/cjfas-2019-0240>
- Webster, R., and Stewart, I. (2023). *Revision of the IPHC length-weight relationship* (Report IPHC-2023-AM099-INF04; pp. 1–29). International Pacific Halibut Commission. <https://www.iphc.int/uploads/2023/11/iphc-2023-am099-inf04.pdf>
- Wilderbuer, T. K., Nichol, D. G., and Ianelli, J. (2018). *Stock assessment and fishery evaluation report for the groundfish resources of the Bering Sea/Aleutian Islands regions*. North Pacific Fishery Management Council.
- Wood, S. N. (2004). Stable and efficient multiple smoothing parameter estimation for generalized additive models. *J. Am. Stat. Assoc.*, 99(467), 673–686. <https://doi.org/10.1198/016214504000000980>
- Wuenschel, M. J., McElroy, W. D., Oliveira, K., and McBride, R. S. (2019). Measuring fish condition: An evaluation of new and old metrics for three species with contrasting life histories. *Can. J. Fish. Aquat. Sci.*, 76(6), 886–903. <https://doi.org/10.1139/cjfas-2018-0076>
- Wyllie-Echeverria, T., and Wooster, W. S. (1998). Year-to-year variations in Bering Sea ice cover and some consequences for fish distributions. *Fish. Oceanogr.*, 7(2), 159–170. <https://doi.org/10.1046/j.1365-2419.1998.00058.x>



- Yang, M. S. (1988). Morphological differences between two congeneric species of pleuronectid flatfishes: Arrowtooth flounder, *Atheresthes stomias*, and Kamchatka flounder, *A. evermanni*. *Fish. Bull.*, 86(608-611).
- Yang, M. S., and Livingston, P. A. (1986). Food habits and diet overlap of two congeneric species, *Atheresthes stomias* and *Atheresthes evermanni*, in the eastern Bering Sea. *Fish. Bull.*, 84(3)(615-623).
- Zacher, L. S., Richar, J. I., Fedewa, E. J., Ryznar, E. R., and Litzow, M. A. (2023a). *The 2022 eastern and northern Bering Sea continental shelf trawl surveys: Results for commercial crab species* [NOAA Tech. Memo.]. NMFS-AFSC-462, 253 p. <https://repository.library.noaa.gov/view/noaa/48669>
- Zacher, L. S., Richar, J. I., Fedewa, E. J., Ryznar, E. R., and Litzow, M. A. (2023b). *The 2023 eastern Bering Sea continental shelf trawl survey: Results for commercial crab species* [NOAA Tech. Memo.]. NMFS-AFSC 482, 213 p. <https://doi.org/10.25923/c5j1-4r46>
- Zacher, L. S., Richar, J. I., Fedewa, E. J., Ryznar, E. R., and Litzow, M. A. (2024). *The 2024 eastern Bering Sea continental shelf trawl survey: Results for commercial crab species DRAFT* [NOAA Tech. Memo.]. <https://www.fisheries.noaa.gov/resource/document/draft-2024-eastern-bering-sea-crab-technical-memorandum>
- Zacher, L. S., Richar, J. I., and Foy, R. J. (2020). *The 2019 eastern Bering Sea continental shelf trawl survey: Results for commercial crab species* (NOAA Tech. Memo. NMFS-AFSC-400; p. 234). U.S. Dep. Commer. <https://doi.org/10.25923/8jdb-5p39>
- Zacher, L. S., Richar, J. I., and Litzow, M. A. (2023). *The 2021 eastern and northern Bering Sea continental shelf trawl surveys: Results for commercial crab species* (pp. 233 p.) [NOAA Tech. Memo.]. U.S. Dep. Commer. <https://repository.library.noaa.gov/view/noaa/48668>
- Zador, S., Aydin, K., and Cope, J. (2011). Fine-scale analysis of arrowtooth flounder *Atheresthes stomias* catch rates reveals spatial trends in abundance. *Mar. Ecol. Prog. Ser.*, 438, 229-239. <https://doi.org/10.3354/meps09316>
- Zhang, C. I., Wilderbuer, T. K., and Walters, G. E. (1998). Biological characteristics and fishery assessment of Alaska plaice, *Pleuronectes quadrituberculatus*, in the eastern Bering Sea. *Mar. Fish. Rev.*, 60(4), 16-27. <https://spo.nmfs.noaa.gov/content/biological-characteristics-and-fishery-assessment-alaska-plaice-pleuronectes-0>
- Zimmermann, M., Dew, C. B., and Malley, B. A. (2009). History of Alaska red king crab, *Paralithodes camtschaticus*, bottom trawl surveys, 1940-61. *Mar. Fish. Rev.*, 71(1), 22.
- Zimmermann, M., and Goddard, P. (1996). Biology and distribution of arrowtooth, *Atheresthes stomias*, and Kamchatka, *A. evermanni*, flounders in Alaskan waters. *Oceanographic Literature Review*, 98, 358-370. <https://spo.nmfs.noaa.gov/sites/default/files/pdf-content/1996/942/zimmermann.pdf>

## Check elements of the citations:

Are there duplicated reference numbers?

FALSE [1] "There are no citation reference number duplicates"

Are all of the DOIs properly recorded?

FALSE [1] "There are no citations with the \"doi.org/\""

Do the doi links work?

FALSE [1] "There are 22 bad links."

FALSE [1] "<https://doi.org/10.1002/2015gl063306>"

FALSE [2] "<https://doi.org/10.1006/jfbi.1999.0927>"

FALSE [3] "<https://doi.org/10.1029/2019gl083816>"

```
FALSE [4] "https://doi.org/10.1046/j.1365-2419.1998.00058.x"
FALSE [5] "https://doi.org/10.1046/j.1365-2419.2001.00157.x"
FALSE [6] "https://doi.org/10.1080/10641260091129161"
FALSE [7] "https://doi.org/10.1111/eva.12874"
FALSE [8] "https://doi.org/10.1111/faf.12375"
FALSE [9] "https://doi.org/10.1111/faf.12569"
FALSE [10] "https://doi.org/10.1111/faf.12744"
FALSE [11] "https://doi.org/10.1111/fog.12458"
FALSE [12] "https://doi.org/10.1111/j.1365-2419.2008.00486.x"
FALSE [13] "https://doi.org/10.1111/j.1365-2419.2010.00549.x"
FALSE [14] "https://doi.org/10.1111/j.1439-0426.2006.00805.x"
FALSE [15] "https://doi.org/10.1139/cjfas-2013-0136"
FALSE [16] "https://doi.org/10.1139/cjfas-2018-0076"
FALSE [17] "https://doi.org/10.1139/cjfas-2019-0240"
FALSE [18] "https://doi.org/10.1139/cjfas-2021-0300"
FALSE [19] "https://doi.org/10.1139/cjfas-2021-0315"
FALSE [20] "https://doi.org/10.1139/f69-188"
FALSE [21] "https://doi.org/10.1198/016214504000000980"
FALSE [22] "https://doi.org/10.1577/t02-138"
```

Do the url links work?

```
FALSE [1] "There are 12 bad links."
```

```
FALSE [1] "https://agupubs.onlinelibrary.wiley.com/doi/10.1029/2019gl083816"
FALSE [2] "https://cdnsiencepub.com/doi/10.1139/f69-188"
FALSE [3] "https://onlinelibrary.wiley.com/doi/10.1111/eva.12874"
FALSE [4] "https://onlinelibrary.wiley.com/doi/10.1111/fog.12458"
FALSE [5] "https://onlinelibrary.wiley.com/doi/10.1111/j.1365-2419.2008.00486.x"
FALSE [6] "https://onlinelibrary.wiley.com/doi/full/10.1046/j.1365-2419.1998.00058.x"
FALSE [7] "https://onlinelibrary.wiley.com/doi/full/10.1046/j.1365-2419.2001.00157.x"
FALSE [8] "https://www.sciencedirect.com/science/article/pii/S0079661119304240"
FALSE [9] "https://www.sciencedirect.com/science/article/pii/S0165783622001126"
FALSE [10] "https://www.sciencedirect.com/science/article/pii/S0165783624000973"
FALSE [11] "https://www.sciencedirect.com/science/article/pii/S0967064516302314"
FALSE [12] "https://www.sciencedirect.com/science/article/pii/S0967064520301284"
```

**are author, year, and title listed for each listing?**

citations a missing entry for title, author, or year:

```
FALSE [1] row    rn    auth year title
FALSE <0 rows> (or 0-length row.names)
```

citations with more than one entry in title, author, or year:

```
FALSE [1] row    rn    auth year title
FALSE <0 rows> (or 0-length row.names)
```

Test citing a report (Markowitz et al. (2023)).