Outdoor Recreation in Southcentral Alaska – Annotated Bibliography

Alaska Department of Natural Resources. (n.d.). Chugach State Park.

http://dnr.alaska.gov/parks/aspunits/chugach/chugachindex.htm

Alaska Department of Natural Resources offers a complete breakdown of outdoor recreational activities available on the whole territory of the state, including Southcentral Alaska. Chugach State Park is one of the most popular destinations for tourists and outdoor recreation fans. The resource provides all information necessary for exploring outdoor recreation in Southcentral Alaska — detailed overviews of campgrounds, cabins, maps, brochures, lists of reservable facilities, and all permits required. It serves as a decent pool of key information, which allows one to understand, what riches the nature of Southcentral Alaska holds, and how the outdoor recreational business is organized. Chugach State Park serves as an example in this instance, as one can easily find similar data on recreational facilities in other Southcentral Alaskan regions, such as Kenai Peninsula. Overall, the Alaska Department of Natural Resources provides a reliable source of information, helpful in exploring Southcentral Alaska's tourism and outdoor recreation sectors.

Berman, M., & Schmidt, J. I. (2019). Economic effects of climate change in Alaska. *Weather, Climate, and Society*, *11*(2), 245-258. <u>https://doi.org/10.1175/WCAS-D-18-0056.1</u>

Berman and Schmidt offer a complex view on the possible economic implications related to climate change in Alaska. In particular, Southcentral Alaska's tourism and recreation industry might be affected by shortened winters and an increased number of rainy days. As a result, such activities as snow sports, marine trips, and hiking might face significant financial losses. However, the main perspective of the study focuses on the whole spectrum of negative consequences related to climate change, and outdoor recreation happens to be one of the more vulnerable sectors of the Alaskan economy. In addition, the paper reveals a necessity for studies of detailed operator data, which is a valuable insight for academic practitioners. Overall, the research provides a solid confirmation of the negative impact of climate change from multiple perspectives. This information is important for the evaluation of outdoor and recreation industry development projects in Southcentral Alaska.

Bhatt, U. S., Lader, R. T., Walsh, J. E., Bieniek, P. A., Thoman, R., Berman, M., Borries-Strigle, C.,

Bulock, K., Chriest, J., Hahn., M., Hendricks, A.S., Jandt, R., Little, J., McEvoy, D.,
Moore, C., Rupp, T.S., Schmidt, J., Stevens, E., Strader., H., Waigl., C., White, J., York,
A., & Ziel, R. (2021). Emerging anthropogenic influences on the Southcentral Alaska
temperature and precipitation extremes and related fires in 2019. *Land*, *10*(1), 82.
https://doi.org/10.3390/land10010082

Bhatt et al. (2021) attempted to put extreme fire activity in Southcentral Alaska during 2019 into historical context and assess future wildfire risk in the region. Their work creates a rather concerning picture for outdoor recreation and tourism. Wildland fires appear to be a natural part of the ecosystem, and they are expected to occur more often due to anthropogenic factors. While this study is not directly focused on the Southcentral Alaskan economy's tourism and outdoor recreation sectors, it contains evidence-based conclusions that hold value for them. For instance, businesses working in outdoor recreation should be ready to invest in fire-safe strategies in order to minimize potential losses, especially if they operate in fire-prone areas. Overall, this study confirmed the growing threat of wildfires in Southcentral Alaska, and any development projects in outdoor recreation areas should be implemented with that factor in mind.

Chan, M. N., Beaudreau, A. H., & Loring, P. A. (2017). Evaluating patterns and drivers of spatial change in the recreational guided fishing sector in Alaska. *PloS One*, *12*(6), e0179584. <u>https://doi.org/10.1371/journal.pone.0179584</u>

Charter fishing represents another popular outdoor leisure activity in Southcentral Alaska. Chan et al. (2017) studied patterns and drivers of activity important both to local tourism and the food system. In particular, their research targeted spatial change of recreational fishing in Homer, the Southcentral Alaskan community with the highest number of charter halibut landings. The findings of the study improve understanding of how the charter fishing business operates and what reasons cause business owners to make the spatial change over time. In that regard, this paper contributes to a better understanding of biological, social, regulatory, and economic drivers of such change. These insights are valuable for the further development of business projects in the charter fishing sector of the outdoor recreation industry.

Marion, S., Davies, A., Demšar, U., Irvine, R. J., Stephens, P. A., & Long, J. (2020). A systematic

review of methods for studying the impacts of outdoor recreation on terrestrial wildlife. *Global Ecology and Conservation*, *22*, e00917.

https://doi.org/10.1016/j.gecco.2020.e00917

Outdoor recreation presents a potential source of disturbance to wildlife populations. Marion et al. (2020) reviewed 126 papers relevant to studying the impact of outdoor recreation on terrestrial wildlife in order to provide practical guidelines for researchers. The paper contains a thorough geographic and methodological breakdown of studies related to wildlife-recreation interaction and offers multiple recommendations for practitioners. In the end, it develops a list of criteria for effective studying of disturbance to wildlife produced by recreational activities. This contribution is important for the development of outdoor recreation and tourism in Southcentral Alaska since successful, ethical business in that sector depends on wildlife and needs to preserve it. An overview of wildlife studying methods and the guidelines for their correct application should assist with establishing the new outdoor recreational businesses in Southcentral Alaska and improve the existing ones.

Mullet, T. C., & Morton, J. M. (2021). Snowmobile effects on height and live stem abundance of wetland shrubs in south-central Alaska. *Journal of Outdoor Recreation and Tourism*, 33, 100347. <u>https://doi.org/10.1016/j.jort.2020.100347</u>

Snowmobiling happens to be one of the more popular and important types of recreational activity in Southcentral Alaska. Mullet and Morton (2021) studied effects produced by snowmobiling on the height and abundance of dwarf birch, shrubby cinquefoil, and sweet gale. The results revealed negative implications of snowmobiling for all three woody shrub species of the Kenai Peninsula, which were even more severe in thin snowpack conditions. In that regard, the paper showed the importance of balancing recreational activities against potential damage to nature. Vegetation serves as an aesthetic advantage of outdoor recreation; therefore, businesses need to put effort into its preservation. The paper provided recommendations on how to mitigate the negative impacts of snowmobiling, which is valuable for the Southcentral Alaskan outdoor recreational sector. In addition, it contained important implications for land management of

public lands, opened to snowmobile activity.

The University of Alaska Center for Economic Development. (2019). *Outdoor recreation: Impacts*

and opportunities.

https://static1.squarespace.com/static/59f6b60bcf81e02892fd0261/t/5c7eff9415fcc04101 11212a/1551826896433/Outdoor+Recreation+-+Impacts+and+Opportunities.pdf

The University of Alaska prepared a comprehensive report on impacts and opportunities created and presented by outdoor recreation in Alaska. In particular, the authors revealed high participation in outdoor activities among the Alaskans and underscored the popularity of outdoor recreation among the guests of the state. The study also evaluated such indicators of economic significance as total spending in the sector, direct jobs, total jobs, and total labor income. In addition, participation and consumer spending were evaluated and divided by activity type. Overall, this report serves as an indispensable source of empirical data related to the outdoor recreational sector of the Alaskan economy. It also allows to understand, which types of activities are more popular, and, therefore, more promising from the business perspective. One of the most remarkable insights contained in the report is the confirmed significance of wildlife viewing in terms of income. Simple and harmless leisure appeared to be the most profitable by a large margin, an important discovery for outdoor recreational business in Southcentral Alaska.

(ORSA).

https://apps.bea.gov/data/special-topics/orsa/summary-sheets/ORSA%20-%20Alaska.pdf An ORSA report by the U.S. Bureau of Economic Analysis (BEA) provides supplementary empirical data on several indicators related to the sector of outdoor recreation in Alaska. It offers such details as value added to GDP, employment numbers in the industry, and compensation paid to employees. While some of these indicators are also available in a report by the University of Alaska, this particular source also contains the data on 2017 and 2018 years. Therefore, it becomes possible to assess specific trends and patterns in the sector on a state level. Overall, the BEA report serves as a solid addition to a more detailed and demographic-based work of the University of Alaska.

References

Alaska Department of Natural Resources. (n.d.). Chugach State Park.

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- Berman, M., & Schmidt, J. I. (2019). Economic effects of climate change in Alaska. *Weather, Climate, and Society*, *11*(2), 245-258. <u>https://doi.org/10.1175/WCAS-D-18-0056.1</u>
- Bhatt, U. S., Lader, R. T., Walsh, J. E., Bieniek, P. A., Thoman, R., Berman, M., Borries-Strigle,
 C., Bulock, K., Chriest, J., Hahn., M., Hendricks, A.S., Jandt, R., Little, J., McEvoy, D.,
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 A., & Ziel, R. (2021). Emerging anthropogenic influences on the Southcentral Alaska

temperature and precipitation extremes and related fires in 2019. Land, 10(1), 82.

https://doi.org/10.3390/land10010082

- Chan, M. N., Beaudreau, A. H., & Loring, P. A. (2017). Evaluating patterns and drivers of spatial change in the recreational guided fishing sector in Alaska. *PloS One*, *12*(6), e0179584. <u>https://doi.org/10.1371/journal.pone.0179584</u>
- Marion, S., Davies, A., Demšar, U., Irvine, R. J., Stephens, P. A., & Long, J. (2020). A systematic review of methods for studying the impacts of outdoor recreation on terrestrial wildlife. *Global Ecology and Conservation*, 22, e00917.
 https://doi.org/10.1016/j.gecco.2020.e00917
- Mullet, T. C., & Morton, J. M. (2021). Snowmobile effects on height and live stem abundance of wetland shrubs in south-central Alaska. *Journal of Outdoor Recreation and Tourism*, 33, 100347. <u>https://doi.org/10.1016/j.jort.2020.100347</u>
- The University of Alaska Center for Economic Development. (2019). *Outdoor recreation: Impacts and opportunities*. <u>https://static1.squarespace.com/static/59f6b60bcf81e02892fd0261/t/5c7eff9415fcc04101</u>

11212a/1551826896433/Outdoor+Recreation+-+Impacts+and+Opportunities.pdf

U.S. Bureau of Economic Analysis. (2019). 2019 – Alaska Outdoor Recreation Satellite Account (ORSA).

https://apps.bea.gov/data/special-topics/orsa/summary-sheets/ORSA%20-%20Alaska.pdf