

For the Next 100 Years: Quantifying Visitation Estimates in Acadia National Park

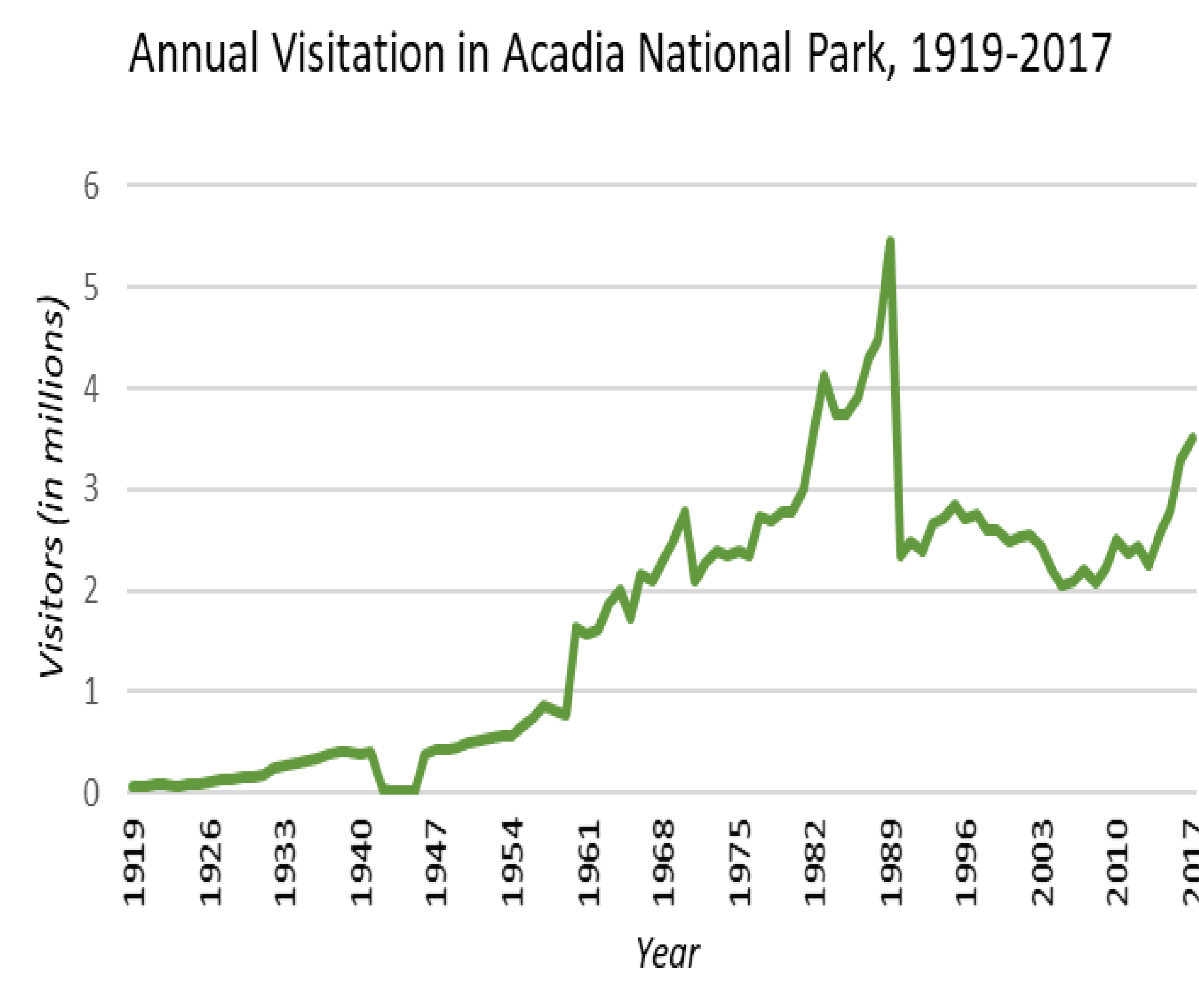
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Abstract

In 2018, visitation in Acadia National Park has registered a 2.3% increase since 2017. Quantifying visitation estimations is a complex effort due to the diverse recreational opportunities, geography, and changing patterns in visitor use in the park.

We use a variety of tools to help inform this work including traffic counters, vehicle occupancy numbers, and visitation statistics from campgrounds, buses, concessioners and cruise ships. In light of substantial increases in visitation after the centennial year in 2016, additional projects are being developed to update vehicle expansion multipliers, including some that are over 25 years old.

Using this suite of methods to approach visitor use and management, these numbers can be used to support robust adaptive management for the next 100 years.



Methods

Visitation data for Acadia National Park is accessible through the NPS Integrated Resource Management Application (IRMA) portal. Various metrics make up the report, including:

- Vehicle count data derived from the Sand Beach traffic counter;
- Formulas that extrapolate vehicle counts at other park locations based on Sand Beach numbers, known as vehicle expansion multipliers;
- Passengers per vehicle data that is applied to the above vehicle counts;
- Bus ridership statistics (for vans, small buses, coach buses, and concessioners);
- 25% of total Island Explorer ridership; and
- The number of overnight stays at Wildwoods, Seawall, Blackwoods, Schoodic Woods Campgrounds, and Isle au Haut.

What's a 'Vehicle Expansion Multiplier'?

A number used in traffic counts that extrapolates how many cars are present at location *b* based on location *a*'s counts. For instance, one car passing over the counter at Sand Beach translates to 2.7 vehicles in the park as a whole during the month of July.



The Peek Sabre traffic counter utilized for traffic counts in Acadia National Park.

Discussion

We will further work to improve accuracy of visitation by use of a vehicle occupancy study to update multipliers used in visitation estimates. Additionally, reviewing traffic counter locations and recommending new sites will help identify locations that are vulnerable to congestion and overuse.

Following the principles of adaptive management, understanding traffic patterns and visitor use is a critical element in implementation of the transportation management plan.

Conclusion

As visitation patterns necessarily change in light of the upcoming transportation management plan, gauging patterns and concentrations of visitation will become all the more critical in the near future. Visitation metrics should be up-to-date and efficiently interwoven into park management so that Acadia's resources, both natural and cultural, will not be degraded by increases in visitation and will be protected beyond the next century.



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