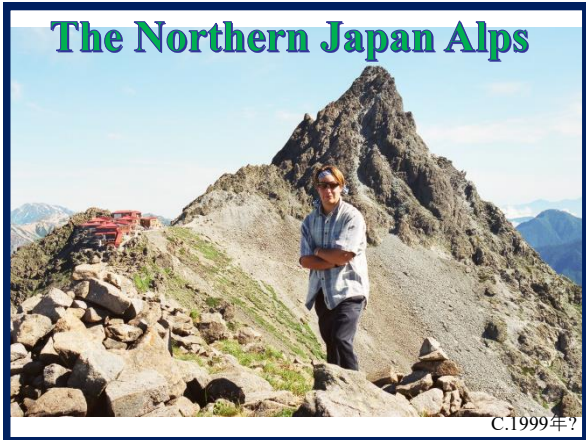




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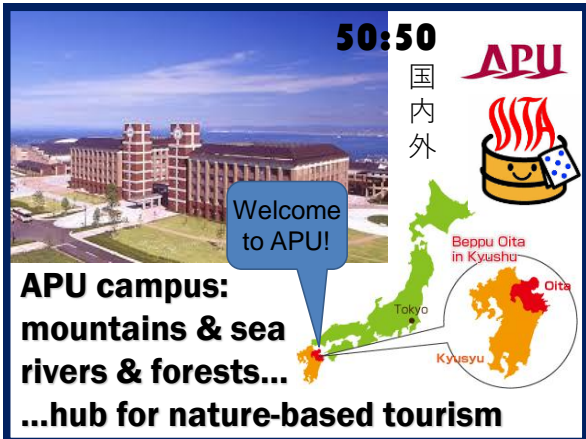
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6

What is a "National Park"?




Fig. 1 One of several elephants killed by Roosevelt in British East Africa, 1909 (Source: *Almanac of Theodore Roosevelt* <http://www.theodore-roosevelt.com/trafrica.html>)

7

Mobility & access: Parks as car paradise?




Drive through giant redwood trees in California: an early NP PR tool

8

Beggar bears:

Drive in to parks' Visitor Centre
 ⇒ the de facto visit style
 some black bears became 'beggars' or 'hold-up bears' hang around roadsides waiting for visitors to stop their cars and throw out food.

Phased out from 1950s, but not until 1970, when Yellowstone banned visitors from feeding bears and set up bearproof garbage containers around the Park, that bear feeding came to a full stop.



Source: <https://yellowstoneinsider.com/2016/07/11/old-yellowstone-history-bear-feeding/>

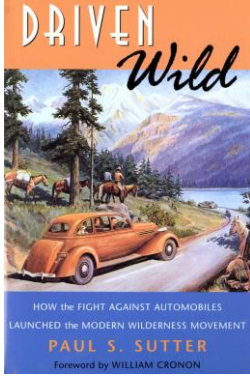
9

Car backlash?

U.S. wilderness movement motivated more by cars than threats from industry & agricultural development

Sutter investigates 4 founders Wilderness Society (1910-30s)

Common fear of growing no.s of cars, road building, and recreational demand etc.



Sutter, P. S. (2009). *Driven wild: How the fight against automobiles launched the modern wilderness movement*. University of Washington Press.

10

What's a "National Park" in Britain?



* retrieved 22.04.2017 at <http://stagsheadbowness.co.uk/cycling.html>

11

Eng + Wales' highest peak

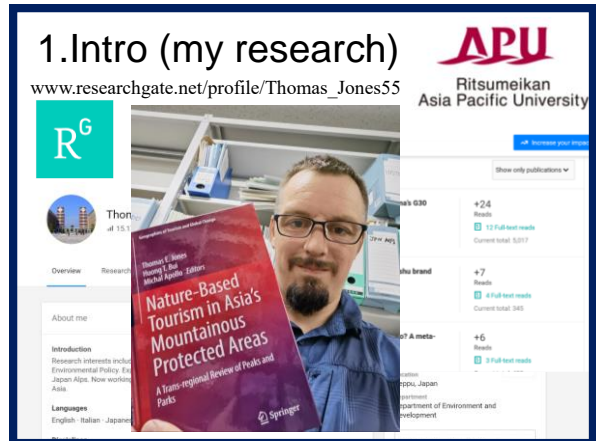


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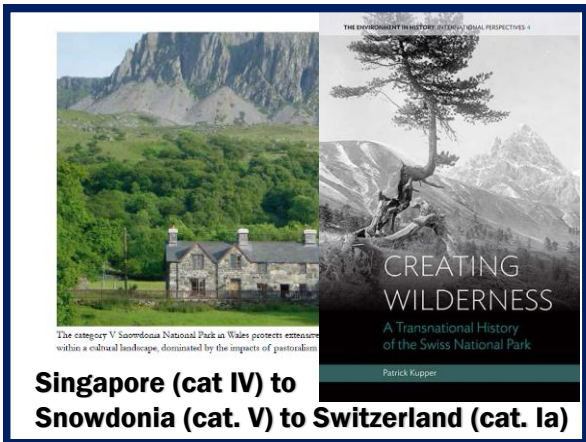
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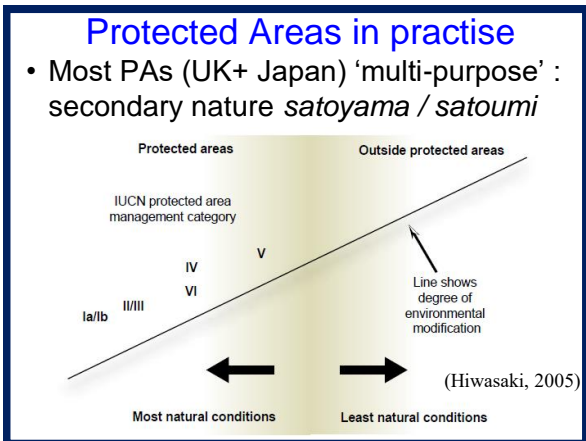
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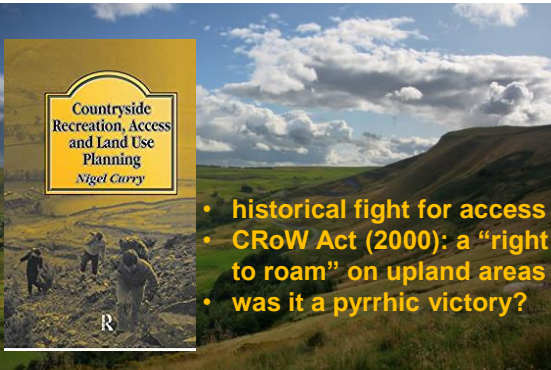
Access "Protected" by regulations

Park management goals dictate the spectrum of visitor opportunities: social welfare vs sustainability?



- **Access** may be prohibited or limited (capacity set)
- **Use** may be restricted e.g. recreation; mining; logging; fishing; farming; hunting; traditional use etc.

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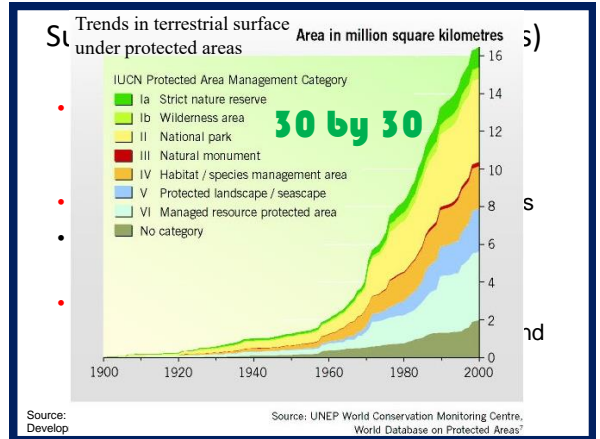


Countryside Recreation, Access and Land Use Planning
Nigel Curry

- historical fight for access
- CRoW Act (2000): a “right to roam” on upland areas
- was it a pyrrhic victory?

• Changing Modes of Access and Conservation in Britain’s National Parks: A Case Study of the Peak District National Park

19



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National parks as a place for “sustainable tourism”?

- biodiversity hot spots & scientific laboratories;
- the “gold standard” of conservation;
- stricter laws, better funding?
- test grounds for env. policy-making, public transport etc.



21

Questioning the 2000 dream of “eco” tourism

“[a] sustainable, non-invasive form of nature-based tourism that focuses primarily on learning about nature first-hand, and which is ethically managed to be low-impact, non-consumptive, and locally oriented (control, benefits and scale). It typically occurs in natural areas, and should contribute to the conservation of such areas.”

Fennell, D. (2008: 24)
Ecotourism (3rd Edition). London: Routledge

22

Limits of pure ecotourism (Weaver, 2019)

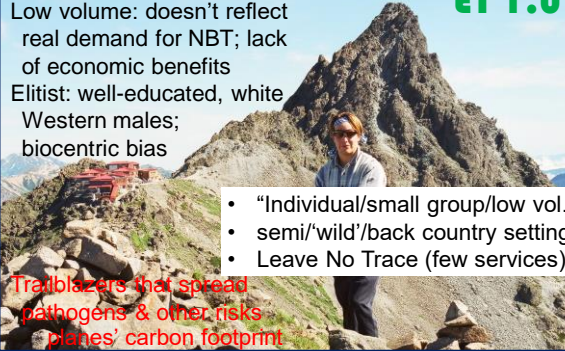
ET 1.0

Low volume: doesn’t reflect real demand for NBT; lack of economic benefits

Elitist: well-educated, white Western males; biocentric bias

- “Individual/small group/low vol.
- semi/’wild/’back country setting
- Leave No Trace (few services)”

Traiblazers that spread pathogens & other risks planes’ carbon footprint



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‘Alternative’ access (to & from and within NPs)



- Upland areas with common grazing rights face challenges
- Exploring the grasslands with battery-powered MTBs. Guide fee inc. ¥ 1000 Conservation.
- New cost-recovery model?

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Today's contents



Ritsumeikan
Asia Pacific University

1. Intro (self & research)
2. Prologue: "what is a national park & why?"
Problem: visitors' mobility ⇔ national parks
3. Alternative transport E.G.s from Japan & UK:
3.1) cycles & 3.2) shuttles
4. Wrap-up & discussion
'bikes' + 'buses'





+

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Today's topic: visitor mobility


- Alternative transport E.G.s from Japan & UK:
 - 3.1) cycles & 3.2) shuttles
 - 3.1a) Bristol to Bath Bike Path: start of Sustrans
 - 3.1b) Pedal Peak District project
 - 3.1c) Yabakei: the maple road
 - 3.2a) Kuju's pilot park-and-ride
 - 3.2b) Kamikochi: Japan's 'Zermatt'?
 - 3.3c) Fujisan











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3.1a) Bristol to Bath Bike Path



1977: Bristol to Bath Bike Path, a 17-mile traffic-free route along an old railway line



1995: 500 miles
2000: 5,000 miles
2005: 10,700 miles
2012: 13,600 miles



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3.1b) Pedal Peak District project




- Pedal Peak District project (2009-2011): £2.25 million to re-open tunnels and re-pave surface of the Monsal Trail Pedal; maintenance, repairs linking routes & promote cycling events.

<https://www.peakdistrict.gov.uk/visiting/places-to-visit/trails/monsaltrail/monsaltrail-information>

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3.1c) Yabakei: the Maple Road


4 seasons scenery

cycle rental stations, mix of models

dedicated 36.1 km cycle lane; disused railway; gentle slopes and one-way rentals etc.



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Cycle tourism

- already popular niche increases post-pandemic
- big potential: 'slow' tourism contributes to the rural economy; cyclists choose PAs for quiet roads, clean air and scenery (Ritchie, 1999).
- Japan has designated cycle lane networks e.g. Shimanami Kaido that connects the main island of Honshu to Shikoku across the Seto Naikai (inland sea); also Yabakei in Oita (prev. E.G.)
- no national network or Sustrans equivalent; lack of funding or lead from national park management

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National Trust: conservation business model

- Primary income from annual subscriptions
Membership numbers increase: 226,200 (1970)
→ 500,000 (1975)



Welcome to **Bakewell Station Car Park**

PEAK DISTRICT
NATIONAL PARK AUTHORITY

Car park charges apply to 10:00 am - 6:00 pm

Car Park Charges	
Cars and Minibuses	
Up to 1 hour	£1.50
Up to 4 hours	£3.50
Per day	£4.50
Coaches	
Any 2 hour period	£4.00
Horse Boxes	
Up to 2 hours	£3.50
Per Day	£7.00
Motorcycles	
All day	£1.50

Disabled badge holders - Free (display badge)

Annual Parking Licences

Residents within the National Park	£25.00
Visitors living outside the National Park	£30.00
Senior Citizens (subject to proof)	£20.00
Single horse box	£40.00

To apply for a parking permit please ring 01629 814 200 or email parking.permissions@peakdistrict.gov.uk

Did you know that your car park fee is used to:

- Maintain our parks
- Help fund litter removal
- Improve coast facilities
- Provide information for visitors
- Help conserve the special qualities of the National Park

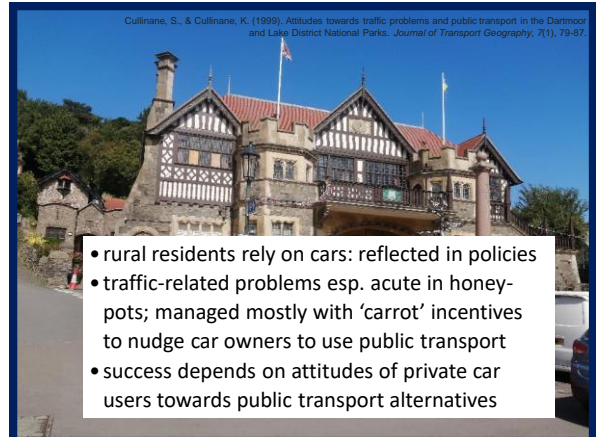
Enjoy your visit!

Thank you for parking responsibly. Please keep your car park clean and tidy.

OCCT may operate in the car park. Please do not drink in the car park. In the event of an emergency dial 999. For queries regarding the car park ring 01629 814 200.

- Extra revenue stream from car parking fees

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- rural residents rely on cars: reflected in policies
- traffic-related problems esp. acute in honeypots; managed mostly with 'carrot' incentives to nudge car owners to use public transport
- success depends on attitudes of private car users towards public transport alternatives

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Lynmouth Cliff Railway

- a water-powered funicular railway on the coast of North Devon (Exmoor NP)
- built in 1892 to carry coal, lime, food and provisions up to the top of the cliff
- 100% carbon neutral ☺
- economically sustainable as a visitor attraction: continuous ops >130yrs!



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National parks... loved to death?



>90% visit by car; traffic congestion; GHG emissions; lack of parking; stress & road rage etc.

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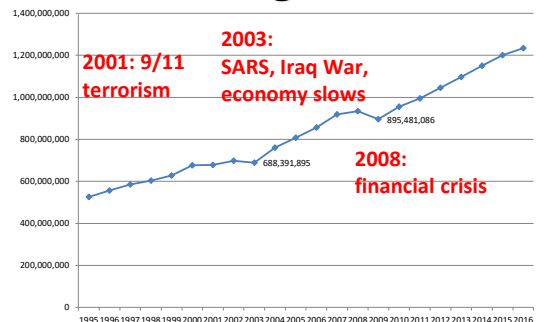
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 - 3.3.c) Fujisan



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Almost unbroken growth of tourism



UNWTO (2002,2003,2004,2020); World Bank (2017 International Tourism)

36

Kyoto Fushimi Inari Shrine



<http://japantravelmate.com/kyoto/kyoto-fushimi-inari-taisha-shrine>

37

Overtourism – e.g. 1



<http://www.wideangleadventure.com/2017/11/28/top-sights-of-kyoto-japan/>

38

Angkor Wat



https://upload.wikimedia.org/wikipedia/commons/8/82/Cambodia_2638B_-_Angkor_Wat.jpg

39

Overtourism – e.g. 2

Angkor Wat



<https://www.southeastasianarchaeology.com/2019/09/11/overtourism-still-threatens-angkor-wat/>

40

Trevi Fountain in Rome



<https://travelexpert.wiki/travel-directory/the-trevi-fountain/>

41

Overtourism – e.g. 3



<https://www.irishtimes.com/opinion/some-cities-near-breaking-point-from-city-breaks-1.3751567>

42

Carrying Capacity

Use of the commons is below the carrying capacity of the land. All users benefit.

If one or more users increase the use of the commons beyond its carrying capacity, the commons becomes degraded. The cost of the degradation is incurred by all users.

Unless environmental costs are accounted for and addressed in land use practices, eventually the land will be unable to support the activity.

Tragedy of the Commons

<http://sourcingrecruitment.info/2016/03/linkedin-pulse-tragedy-commons/>

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Ecological carrying capacity

1 In 1911, 25 reindeer were introduced to the island.

2 The population rose rapidly to more than 2,000 individuals.

3 The population crashed because the reindeer heavily overgrazed their winter food source, lowering the carrying capacity of the environment.

1911: 4 male & 21 female reindeer introduced onto St. Paul Island near Alaska (no predators)

Figure 34-8 Discover Biology 3/e © 2006 W. W. Norton & Company, Inc.

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混雑感を測る

Source: Photographs prepared by Wayne Freedland, University of Minnesota, Robert Manning, University of Vermont and David Lurie, University of Minnesota

FIGURE 2: Sample computer-generated photographs illustrating a range of use levels in terms of people at one time at Delicate Arch in Arches National Park, Utah, with 0 (a) people, 12 (b) people, 52 (c) people and 108 (d) people.

Sample computer-generated photographs illustrating a range of use levels in terms of people at one time at Delicate Arch in Arches National Park, Utah, with (a) 0 people, (b) 12 people, (c) 52 people & (d) 108 people.

45

e.g. Boracay max of 19,000 tourists at a time!

Source: Adapted from Manning, R., 2001, "Visitor experience and resource protection: A framework for managing the carrying capacity of national parks", *Journal of Park and Recreation Administration* 19, 93-108

FIGURE 3: Average acceptability ratings for the 16 photographs illustrating a range of people at one time at Delicate Arch in Arches National Park, Utah.

Average acceptability ratings for the 16 photographs illustrating a range of people at one time at Delicate Arch in Arches National Park, Utah.

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Carrying Capacity

the MAX number of people who can use a site without an unacceptable alteration in the **physical environment** and without an unacceptable decline in the **quality of experience** gained by visitors (Mathieson & Wall, 1982)

crowding + congestion

UNWTO definition: "the **maximum number** of people that may visit a tourist destination at the same time, without causing **destruction** of the physical, economic, socio-cultural environment and an unacceptable **decrease** in the quality of visitors' satisfaction"

Magic number!

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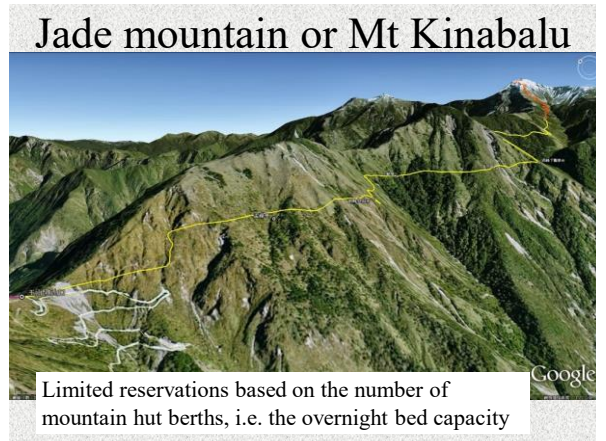
オーバーツーリズム

<https://smatourism.com/why-carrying-capacity-should-be-a-last-resort/>

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Regulations & limits on numbers? Or use market mechanisms?



Hoi An Ancient Town, Vietnam
cost recovery mechanism


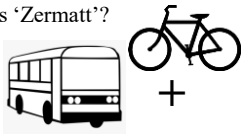

- Visitors buy a book of tickets to enter Ancient Town + 5 sites
- Fund used for management, maintenance, events & festivals



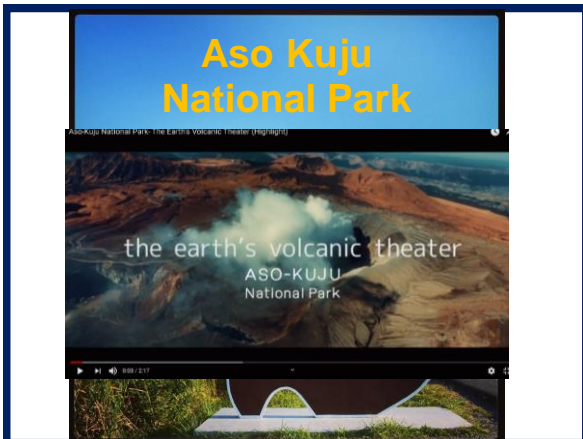

53

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Aso-Kuju National Park: nearest to APU

- Located in Kumamoto and Oita prefectures.
- Named after Mt. Aso and Kuju Mountains
- GIAHS/ Geopark/National Park
- Tadewara wetland (Hiking visitors)

Registered in the Ramsar Site

- Chojaboru & Makinoto (Climbing visitors)

FY 2019-22: field work in Kuju

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Aso Kuju: a 'drive-through' design?

Aso Kuju: extended catchment areas include surrounding urban hubs of Fukuoka & Kumamoto

the largest national park in Kyushu; upland area of 727 km² includes Aso caldera and Kuju mountains; known for automobile touring, (17,105円 spend per capita & o/night stays among lowest of NPs);

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MOE visitor survey: results reveal visitor demand trends

Activity	Domestic (%)	International (%)
登山・トレッキング、ハイキング	21.9%	32.3%
乗馬・ホーストレッキング	4.4%	12.3%
ゴルフ・カート・ハイ遊覧・気球	0.7%	1.2%
サイクリング	4.8%	15.3%
観光・自然観察・まち歩き	15.0%	33.4%
光景・動物園 (牧場やドクター)	25.4%	26.7%
ドライブ・ツーリング	33.2%	29.2%
写真・写生	18.4%	25.5%
現地グルメ・名物料理	13.1%	39.8%
ショッピング・買い物	9.9%	35.7%
リゾート滞在	2.4%	6.4%

- 2018 June – 2019 March
- Sample size = 621 (F: 325 + J:296)
- #1 attraction was onsen ♨ hot springs (F: 60%; J: 58%)
- #2 attraction sightseeing spots & nature (F: 57%; J: 41%)
- low proportion of cycling (F: 6%; J: 1%)

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Pre- pandemic NBT: visitor survey

□ NBT push-factor motivation domains of visitors to a Japanese national park (Aso-Kuju); segment analysis of domestic Vs international visitors based on their motivations, demographics, and trip profiles.

Dates : 2019.11.2-4、16-17
Valid response : Jpn 71人、Int 66人
<https://www.sciendo.com/article/10.2478/quageo-2021-0013>

59

Pandemic-era NBT: boom AND bust?

- during Covid, closed borders prevent foreign tourists from entering Japan and heavily restrict outbound travel
- "stay-cations" and micro-tourism (trips <1 hr radius from home) flourished due to growth in domestic demand (Ito, 2021).

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Post- pandemic NBT: visitor survey

Methodology

Primary data collection: On-site survey (Paper)

No. of Responses: 610

Language: Japanese/ English

Participants: Visitors to Tadewara wetland and mountain climbers in the Aso Kuju National Park

Location: Aso Kuju National Park

Date: 10.29-10.30 and 11.5-11.6 (2022)

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Domestic visitors' demographic profile

GENDER

Gender	Count
Male	339
Female	246
Total	585

Female 42%, Male 58%

INCOME

Income Range (JPY)	Percentage
Less than 2,000,000	16%
2,000,000-5,999,999	17%
6,000,000-7,999,999	51%

AGE

Age Group	Percentage
10's	2%
20's	7%
30's	2%
40's	22%
50's	25%
60's	18%
70's	12%

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H1: Observing overused of the place has a positive influence on visitors' intention to pay the conservation donation.

H2: The more frequently people visit the national park, the stronger they are willing to pay the conservation donation.

Kuju climbing experience

H3: Mountain climbing has a more positive influence on people's willingness to pay conservation donations than hiking.

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Monitoring visitors' profile

- More male respondents (58%); 56% aged 50s or over.
- 2-6 million JPY income is 51% (>average income in Japan).
- Mountain climbing is the major reason for visitors (81%).
- At least three visits to Aso Kuju National Park had been made by 77% of the respondents.
- 56% of the respondents think everyone should pay the conservation donation.
- The average amount of conservation donations people are WTP is 491 JPY.

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収容能力 Carrying Capacity

40,000人

post-COVID proposals at Mt Fuji to limit the number of climbers; but cultural taboo and economic incentives prevent implementation

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2020: chance to re-think?

closed

- **Sector:** Tourism industry (among worst affected)
- **Place:** Fujisan, Japan (esp. 5th station & above)
- **Time:** July-Sep (the official climbing season)
- **Environmental impact:** congestion; human waste
- **Intervention:** limit the number of climbers

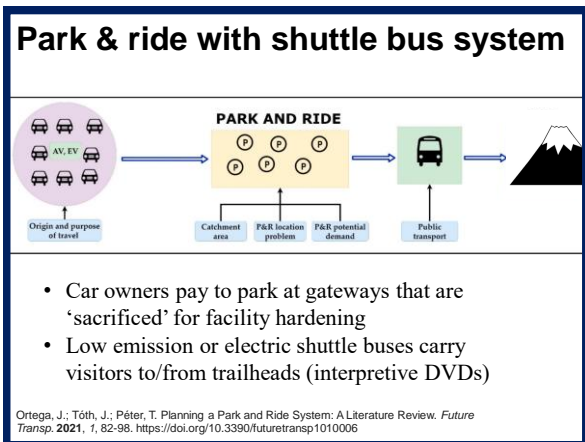
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Severe traffic in the 1960s-1970s



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Park and ride system since 1975



73

Enlightened mass tourism

Kamikochi's E.G. reactive & elitist? We need to re-consider national park management goals: what do we want and expect from our parks?

Few examples of sustainable mobility masterplans

David Weaver's pragmatic ecotourism prototype:

- NE Asia's high volume (economies of scale)
- serviced semi-natural settings (trails & toilets etc)
- selective disturbance of PAs (zoning)
- alternative access options attract tourists
- sustainable transport for (mass) tourism

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Thanks for listening!!



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References

- Jones, T. E., & Nguyen, M. H. (2021). Nature-based tourism motivations and visit profiles of domestic and international segments to a Japanese national park. *Quaestiones Geographicae*, 40(2), 77-92.
- Jones, T. E., Bui, H., & Apollo, M. (2021). *Nature-Based Tourism in Asia's Mountainous Protected Areas*. Cham, Switzerland: Springer Nature.
- Sutter, P. S. (2009). *Driven wild: How the fight against automobiles launched the modern wilderness movement*. University of Washington Press.
- Weaver, D. B., & Lawton, L. J. (2017). A new visitation paradigm for protected areas. *Tourism Management*, 60, 140-146.

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Video Links

- Snowdon Mountain Railway
https://www.youtube.com/watch?v=9P-Qb_to4og
- Aso-Kuju National Park
<https://www.youtube.com/watch?v=zzfdvkEYT-8>
- Cycling On An Old Railway In Oita | Nakatsushi Yabakei
<https://www.youtube.com/watch?v=OrzYkRI5OWA&t=175s>
- Monsal Trail Tunnels Timelapse 2019 • GoPro
<https://www.youtube.com/watch?v=cZZ21xVCHfQ>

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