

HEALTHY OUTSIDE HEALTHY INSIDE

THE HEALTH & WELL-BEING BENEFITS OF ALBERTA'S PARKS & PROTECTED AREAS

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THE FULL BENEFITS OF PROTECTED AREAS ARE SELDOM RECOGNIZED

- There is compelling evidence that “contact with nature” can:
 - » Be restorative/therapeutic (decrease tension, depression, confusion, anger, increase energy)
 - » Increase frequency & duration of physical activity
 - » Aid in recovery from surgery
 - » Reduce childhood stress
 - » Coping tool for ADD/ADHD
- Child development benefits: social, cognitive, emotional, physical
- People have a more **positive outlook on life** and **higher life satisfaction** when in close proximity to nature
- The majority of “**favourite places**” are natural
- *Despite “natural advantage”, park agencies across Canada experiencing cutbacks, resulting in capacity challenges – adaptive management?*



CHAPTER 8.

An Act to establish the Algonquin National Park of Ontario.

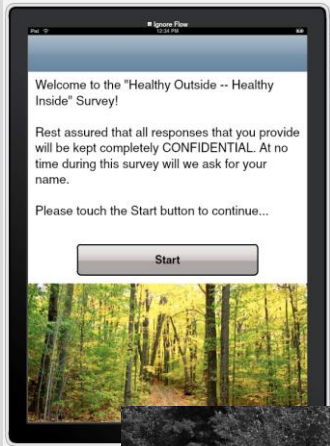
[Assented to 27th May, 1893.]

3.—(1) The said tract of land is hereby reserved and set apart as a public park and forest reservation, fish and game preserve, health resort and pleasure ground for the benefit, advantage and enjoyment of the people of the Province, subject to the provisions of this Act and of the regulations hereinafter mentioned, and shall be known as the Algonquin National Park of Ontario.

(g) The preservation and protection of game and fish, of wild birds generally and of any and all animals in the park, and for the destruction of wolves, bears and other noxious or injurious or destructive animals.

(b) The lease for any term of years of such parcels of land in the park as he deems advisable, for the construction of buildings for ordinary habitation, and such other buildings as may be necessary for the accommodation of visitors or persons resorting to the park as a sanitarium or health or summer resort.

METHODS



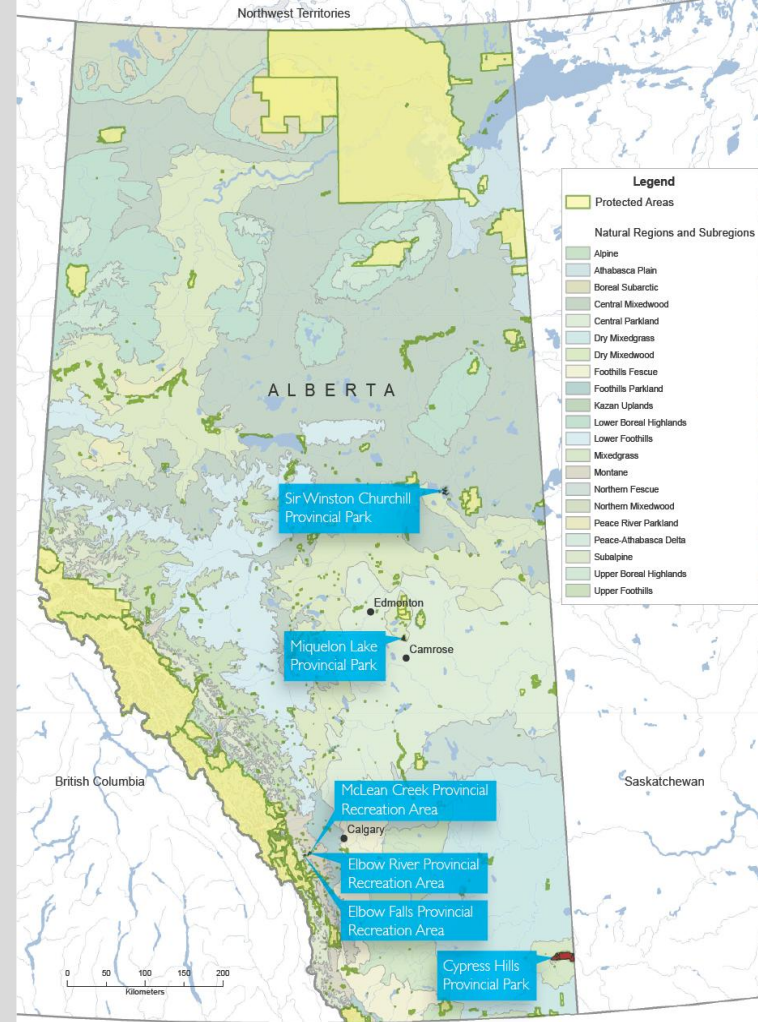
- Surveying occurred in summers 2012 and 2013
- *In-situ* surveying of park visitors at various intercept points, including trailheads, visitor centers, campsites, etc.
- Sampling was systematically proportioned across the month, week and time of day



STUDY SITES

Strategically selected based on:

- Proximity to different urban centres
- *Representation of different natural regions
- Different visitor experiences: DA: what is a healthy park?
- These differing attributes allowed for a range of influencing factors to be included in the survey





»» Cypress Hills Provincial Park (2012)



» Kananaskis Country PRAs (2012)

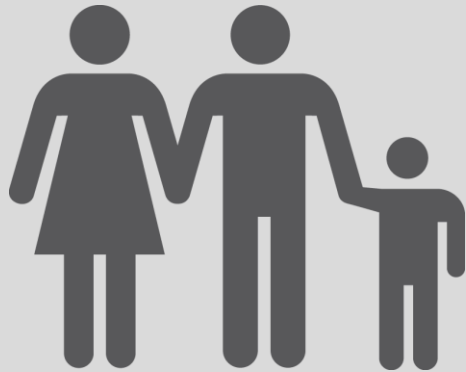


» Sir Winston Churchill Provincial Park (2013)



» Miquelon Lake Provincial Park (2013)

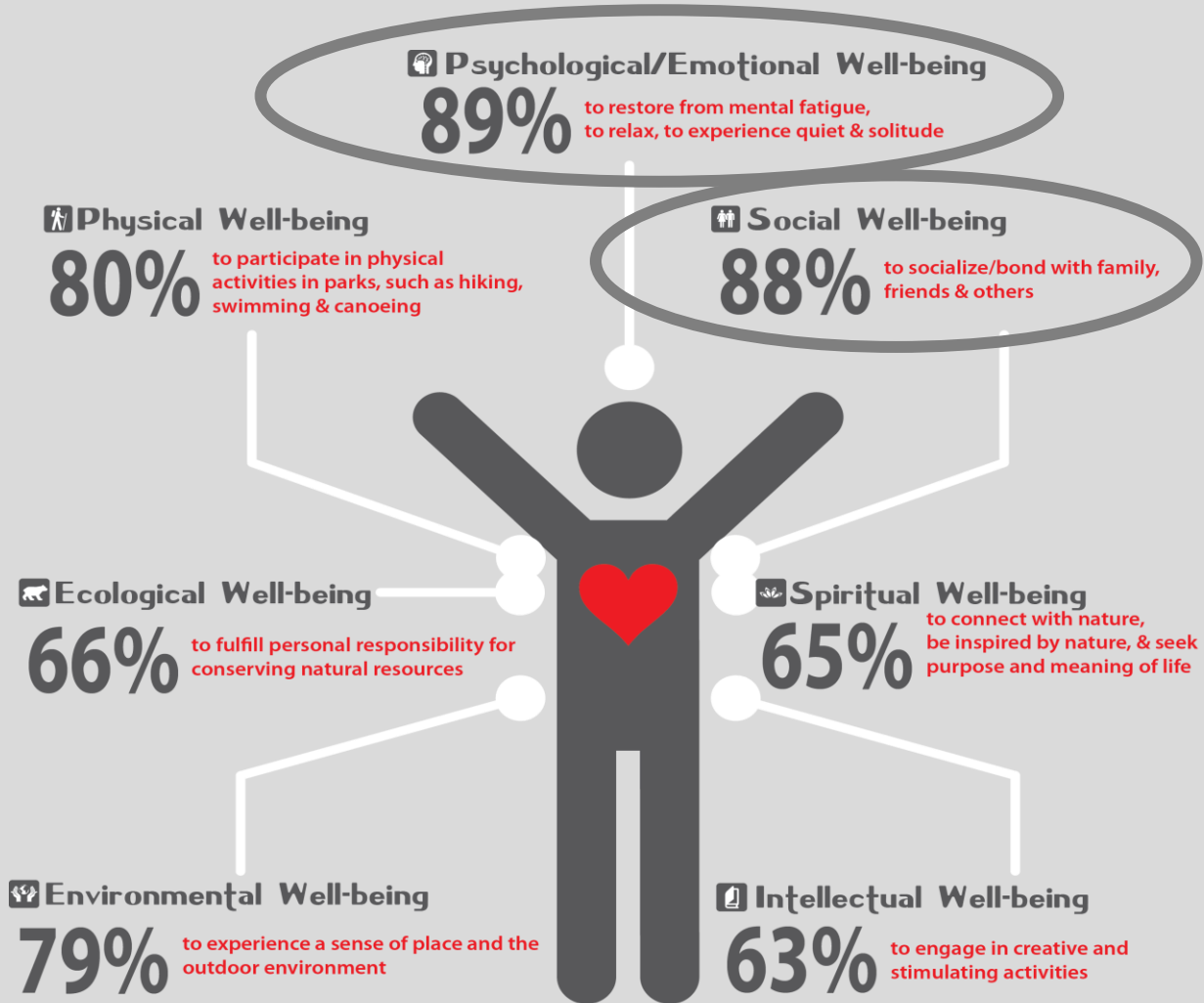
RESULTS: THE SAMPLE



- **1,515 participants** (representative of visitors)
- Included all adult age groups (avg age 43)
 - » slightly over-represented by females (55%)
- **Other characteristics:**
 - » 3.6 days avg length of stay
 - » Avg camping size = 3.5, 53% brought children (1.5 avg)
 - » Avg BMI of 26.3 (slightly overweight)
 - » 93% from Alberta
 - » Employed, educated, high incomes
- **Quality of Life:** relatively happy
- **Perceived physical health:** 52% VG>excellent
- **Perceived mental health:** 42% VG>excellent
- **Stress prior to visit:** 35% Extremely>quite



RESULTS: MOTIVATIONS



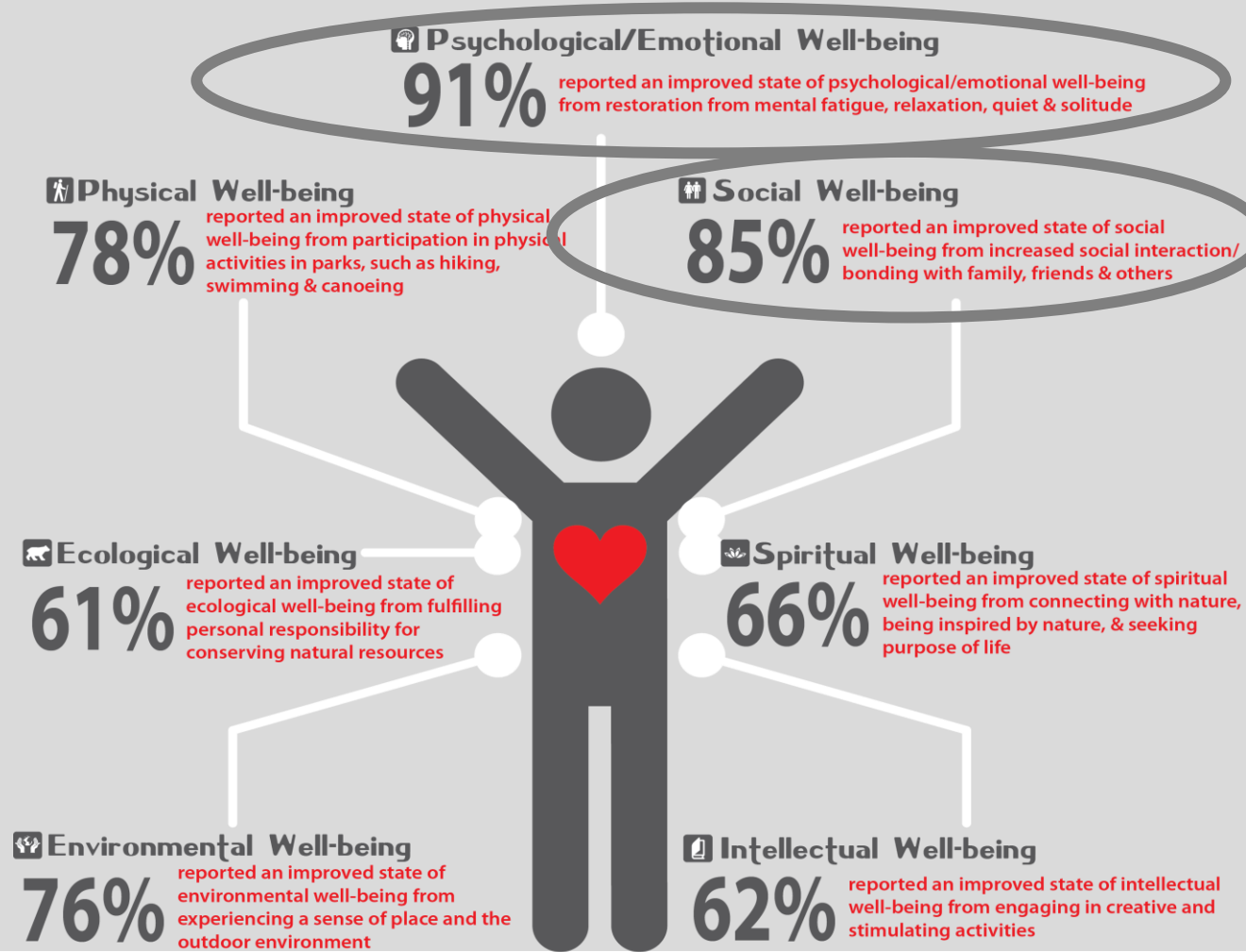
» How important did each of the following health and well-being-related reasons play in your decision to visit this park?

BEHIND THE NUMBERS

- Older visitors were more **highly motivated** for cultural, economic and spiritual well-being related reasons.
- **Females** tended to rate financial, social, psychological/emotional and spiritual well-being motivations higher than males.
- Visitors were **strongly motivated** for health and well-being related reasons, **irrespective** of the length of visit.



RESULTS: OUTCOMES



To what extent do you feel your visit to this park has impacted your general state of health and well-being in each of the following ways?

BEHIND THE NUMBERS

- **Females** perceived greater benefits than males associated with their visit, especially with respect to spiritual, social, psychological/emotional, and financial well-being.
- **More frequent visitors** tend to be of **better** physical health, and tend to perceive **greater** well-being benefits and outcomes associated with visiting protected areas.
- Health and well-being benefits tend to **go up** with years since first visit, frequency of visit, perceived state of physical health, life satisfaction, number of active and sedate activities, and **especially nature relatedness**.



RESULTS: CHILD BENEFITS

Physical Development

94% agreed that park experiences improve the physical development of children

Social Knowledge & Competence

93% agreed that park experiences improve social knowledge & competence in children

Cognitive Learning & Language

87% agreed that park experiences improve concentration, observation & creativity in children

Personal-social Behaviour

88% agreed that park experiences improve self-discipline and social interaction in children



- Visitors **consistently** and **strongly perceived** visits to parks as important for child development, regardless of the protected area visited.
- **A Mother Knows Best?** Notably, **females** rated **all benefits** for children **significantly higher** than males, especially with respect to anxiety, personal-social behaviour, and social competence and knowledge.

» To what extent do you agree that visiting parks improve the following characteristics of a child's health and well-being?

OTHER INSIGHTS

- **Nature Relatedness is Important:**
 - » Park visitors had a **strong affinity** with the natural environment, a sense of identity that includes nature, and a desire to be outdoors in the wilderness.
 - » Health motivations and benefits (or outcomes) were **correlated highly** with **nature relatedness**, meaning the *more connected one is to nature, the greater the motivation to visit parks and the greater the health and well-being benefits received from park experiences.*
- **Personal Commitment to Parks ‘Product and Services’ is Important, “What a Woman Wants?!”:**
 - » The study revealed a **positive correlation** between a high level of personal commitment to parks and a perceived improvement in health and well-being derived from visitation.
 - » Females **strongly identify** with parks (self image), and, perhaps surprisingly, drive the decision to visit them.



DIGGING DEEPER INTO NATURE RELATEDNESS

- < 5% of variation in NR is explained by socio-demographics such as age, gender, education, etc.
- Duration of visit, frequency of visits, number of years since first visit do not explain NR
 - » Therefore, “nature dosage” may not matter... *you just have to go!*
- **Spiritual Well-being** very highly correlated with NR (34% motivations / 30 % outcomes)
 - » **Caution: homogeneous sample!**
- Location matters! (SW Churchill PP)



IMPLICATIONS FOR PA AGENCIES

- Strong role of PAs for health and well-being
 - » **Recognize and promote that role? Strategic policy needed?**
 - » **Reframing? Resetting? Redefining? Realigning?**
- Benefits-based management? Is this even desirable?
 - » **Identify and define outcomes (person, society)**
 - » **Identify goals, design facilities and experiences**
- Links between various sectors
 - » **Parks, health, education, tourism, infrastructure**
 - » **Target groups or sites, resources available**
 - » **Can biodiversity benefit from this initiative? How?**



REALIZING THE **FULL BENEFITS** OF PROTECTED AREAS

- Integrate well-being into SOP reports – visitor impacts considered a stress, no “state of” indicators pertaining to visitor numbers, experiences, outcomes.
- Learn from others
 - » **Parks Victoria (Healthy Parks, Healthy People)**
- Further research: build the “evidence base”, document, inform, manage adaptively
- Best practices: design, experiences
 - » Is the “Movement” influencing behaviour change?
- ***Educate current visitors**
- ***Marketing to future visitors: how inform?**



Silent Lake PP, Ontario



E. FACTOR ANALYSIS (YEAR 1)

- 12 components identified, 64% of visitors



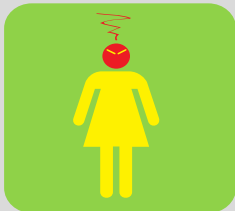
1. “The Parkie” (20%)

- Very committed to parks concept, motivated highly by health and well-being benefits, all benefits received



2. “Nature Boot-campers” (8%)

- Very committed to parks concept, wealthy, educated, fit, but POOR mental health
- Motivated for physical reasons, don't care about finances

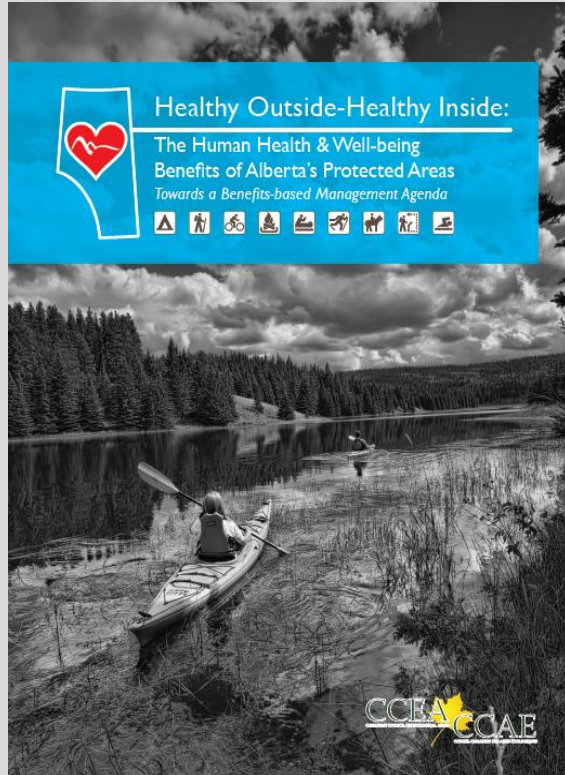


1. “Nature Rehabers” (6%)

- Young females, NOT satisfied with life and highly stressed in week prior to visit
- Highly motivated for psychological/emotional reasons
- Significant psychological/emotional benefits received



MORE INFORMATION



- Download the report at: CCEA.org



- Follow CCEA on Twitter! [@cceaccae](https://twitter.com/cceaccae)



ACKNOWLEDGEMENTS

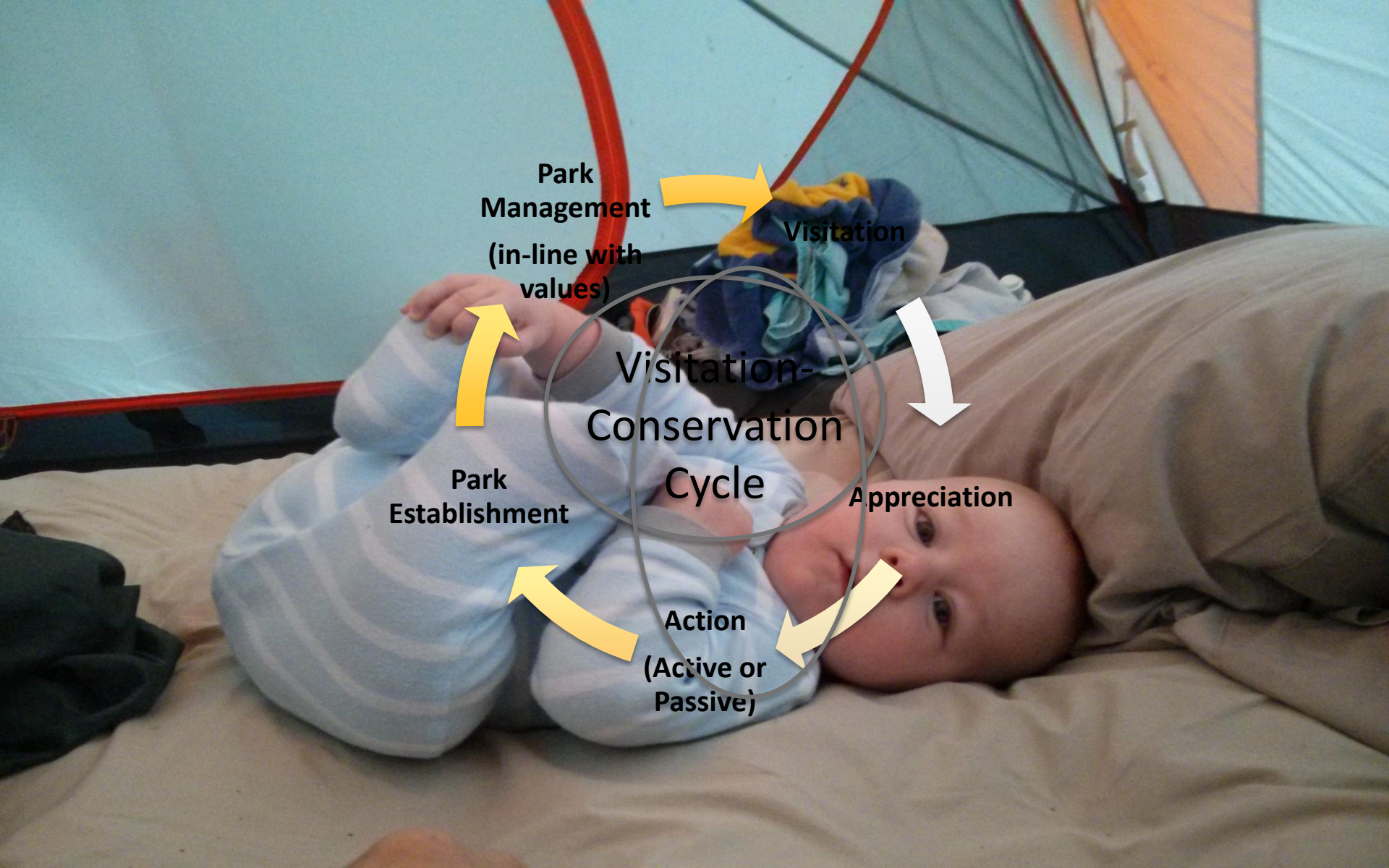
THE MANY VOLUNTEERS/STUDENTS WHO ASSISTED WITH DATA
COLLECTION

ALBERTA PARKS

DON CARRUTHERS DEN HOED, DR. MATTHEW WHEATLEY, ROY
FINZEL, PETER SWAIN, NORMAND DUROCHER, LAUREN ZABEL

AND MANY OTHERS





Park Management
(in-line with values)

Visitation

Visitation-
Conservation
Cycle

Appreciation

Park Establishment

Action
(Active or
Passive)

