

National parks as a collective experience

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ABSTRACT

Much U.S. national park research and management has focused on "crowding," with many researchers often assuming higher visitor density inevitably degrades visitor experience. While valuable in guiding the protection and management of national parks, this "deficit-based" crowding framework largely overlooks one of the positive externalities of high visitor density: the shared joy of collective experience. We argue that this traditional view stems from specific ideals of solitude, often excluding the motivations of an increasingly diverse visitor base. This paper introduces a complementary concept centered on "communitas" — spontaneous social solidarity. We reframe the presence of others not as a problem, but as a potential source of connection under certain visitor archetypes and recreational settings. We propose to operationalize this concept within existing visitor use management frameworks. By treating positive social interaction as a measurable indicator while balancing resource protection, managers can create more inclusive environments that validate diverse ways of experiencing nature.

1. Introduction

Are U.S. national parks overcrowded? In mass media and in academic discourse, the answer seems to be a resounding Yes. Many newspaper articles warn of increasing number of visitors overwhelming national park capacity and leading to long wait lines and disgruntled visitors (e.g., Tran, 2021). Academic researchers describe U.S. national parks as "strained by congestion and overuse" (Carr & Newbold, 2025, p. 1).

Past research clearly demonstrates that crowding does happen, and it degrades user experiences and precious natural resources, and brings stress to local communities' infrastructure and residents' wellbeing. Much of the research conducted at U.S. national parks assumes that a higher visitor density is *always* non-preferable, and each additional encounter unequivocally negatively impacts the experience. Many projects have focused on strategies for reducing crowding at attractions and hiking trails (Carr & Newbold, 2025; Manning, 2022). However, many other studies demonstrated that crowding is fleeting and concentrated, occurring at a pinch point in the trail, or when visitor encounters at a mountain peak exceed expectations and endanger natural resources (Drage et al., 2021; Manning, 2022). Study after study has revealed a tenuous relationship between visitor density and experience quality

(Nickerson et al., 2020). To address this discrepancy, we could trace the origins of the concept of crowding and discuss our changing social and ecological landscape.

By way of situating our positionality, our own national park visitation experiences inspired us to ponder the collective experience in national parks—when the visitor crowds elevate our experience, instead of degrading it. Current visitor use management frameworks often lack the mechanism to capture this positive value. This paper argues that while the traditional "density-crowding-dissatisfaction" model (Manning & Ciali, 1980) captures the *costs* of high use, it fails to capture the *benefits* of social congregation for more diverse user groups. We propose a shift in perspective, not to replace the necessary protection of resources, but to expand our understanding of "quality" experiences. We begin by reviewing the historical roots of the solitude ideal and assumption that more people inevitably lead to crowding, arguing that in the U.S. context, they originate from a westernized and elitist perspective on wilderness. We then introduce the concept of "communitas" as a positive externality. Finally, we demonstrate how to integrate this concept into practical frameworks such as Limits of Acceptable Change (LAC) and Interagency Visitor Use Management Council's (IVUMC) framework in the United States.¹

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¹ See <https://visitorusemanagement.nps.gov/VUM/Framework>.

2. The origins of the crowding and carrying capacity concepts

According to Vaske and Shelby (2008a, 2008b), crowding is a negative, normative evaluation of visitor density, or number of visitor encounters. The concept of crowding is inherently linked to the concept of social carrying capacity, inspired by the ecological principle of carrying capacity in range management (Hadwen & Palmer, 1922). Carrying capacity is foundational in determining the appropriate stocking rates in order to balance livestock needs and rangeland health. Later, Wagar (1964) introduced the concept of “recreational carrying capacity” as “the level of recreational use an area can withstand while providing a sustained quality of recreation” (p. 3). He suggests that beyond a certain number of visitors, experience will deteriorate into crowding. It is essential to note that Wagar’s original conceptualization of the capacity is primarily focused on impacts to visitor experience instead of the ecological impacts of recreation.

Just 14 years after the publication of Wagar’s monograph, the U.S. Congress passed the National Park and Recreation Act in 1978, which established a statutory requirement (54 U.S.C. § 100502) that each national park’s general management plan must include visitor carrying capacities. Such a policy codifies the assumptions of Manning’s structural social norm curve which assumes a monotonic function between visitor density and visitors’ subjective evaluation (the solid curve in Fig. 1). Dense use conditions exceeding a threshold of carrying capacity will inevitably lead to crowding, which in turn results in visitors’ dissatisfaction. In current standards, U.S. federal management—including the National Park Service—the Interagency Visitor Use Management Council’s (IVUMC) framework defines visitor capacity as “the maximum amounts and types of visitor use that an area can accommodate while achieving and maintaining desired resource conditions and visitor experiences that are consistent with the purposes for which the area was established.” (2016, p. 43). A myriad of approaches to defining these capacities have been developed; numerous special issues have debated the theory and the measurement of capacity (e.g., Graefe et al., 1984).

3. A Critique of crowding and carrying capacity measurements

Many scholars have questioned the implicit assumption of crowding. Dr. Steve McCool often states: “People are not cows!” (personal communication); thus, we cannot manage them as such. In his commentary on the “Frauds and Deceits in Recreation Management,” More (2002) also concludes, “While I do not dispute that there are problems in some areas, many claims protect the interests of elite users at the potential expense of others” (p. 62). He continues,

Overuse, crowding, and sustainability of public lands must be of concern in a nation whose population is expected to double by 2050.² Yet, when I stand back and realize that these same concepts are used to justify policies that systematically advance management interests at the expense of low-income people, that protect subsidies accruing to elite users ... Then I have to wonder what role our concepts played in bringing us to this point. (p. 75)

Much empirical research has disputed the generalizability of the assumed structural social norm curve in national park settings (Kuentzel and Heberlein, 2003 ; Manning, 2022; Shelby & Heberlein, 1986), finding that the density of visitors is less predictive of crowding than other factors, such as visitor behavior (Vaske & Donnelly, 2002; Manning, 2022; Arnberger & Brandenburg, 2007). Stankey and McCool (1984) find that “the statistical association between encounters and satisfaction is weak” (pp. 466). Wagar (1964) was quick to point out that some recreationists, depending on their motivations, may have their

experiences enhanced by increases in visitor density. He wrote a lament for his introduction of the carrying capacity concept in recreation management: “in many ways, it was a bad choice that has diverted our attention from more promising approaches to effective management of recreation lands” (Wagar, 1974, p. 274). He continues, “Every statement of recreational carrying capacity includes the assumption (often not explicitly stated) that unacceptable consequences will occur if use is permitted at a higher level. Defining what is acceptable, however, is a value choice rather than a technical issue” (p. 274). Empirical results supporting the assumed structural social norm curve and the assumption of negative experiential impacts are generally sparser than those that fail to support the model. This realization has not stopped the growth of tourism and recreation research on crowding and carrying capacity, to the point where Burch (1984) concludes that “the social carrying capacity literature seems a clear case where the immediate problem of research came not from some theoretical demand of social science but from the real or fantasy concerns of resource managers” (p. 488). Burch continues, “Are we primarily interested in understanding the human behavioral dimensions of wildland systems or are we primarily interested in providing a rationale for a priori management decisions?” (1984, p. 488).

How did the assumed, baseline structural social norm curve (where optimal conditions are assumed to exist when no others are present) become so rooted in our thinking of national parks? Tracing back in history, Bryson (1999) writes of the origins of the American notion of crowding as beginning with the pioneer Daniel Boone (1734-1820) who “famously is supposed to have looked out his cabin window one day, seen a wisp of smoke rising from a homesteader’s dwelling on a distant mountain, and announced his intention to move on, complaining bitterly that the neighborhood was getting too crowded” (p. 108). Since then, “moves are constantly afoot to restrict access to national parks and wilderness areas on the grounds that they are dangerously overrun” (p. 106). Powell (2015) traces the origins of the early conservation movement not merely to ecological concerns, but also to anxieties about the loss of wilderness solitude as a defining element of national identity. Later in 1935, Aldo Leopold, described the national parks as “overcrowded hospitals trying to cope with an epidemic of esthetic rickets” (1999, p. 287). Ornithologist and eugenicist William Vogt wrote to Leopold in a letter: “Certainly the current policy tends to build up the public that normally would go to Ventura Beach and Coney Island³ - and belongs there” (1943, para. 4). These stories and quotes indicate that the ‘leave-me-alone’ sentiment is an elitist view on who belongs in our national parks, and predates the emergence of modern measurements of crowding and represent a value-laden concept.

Thus, it is essential to acknowledge that what we now refer to as “crowding” in parks and protected areas is not merely a physical condition—it is a social construct deeply embedded in American cultural values of personal space, wilderness, and individualism, and the notion of who belongs there and who does not. The expectation of solitude in outdoor spaces has been institutionalized through park policies, visitor use standards, and even research frameworks, many years before the dramatic increase of visitor numbers, often without sufficient reflection on its cultural specificity or normative origins. Even our understanding of what solitude means in the realm of visitor use management may be largely out-of-touch. As early as 1977, Lee found that solitude in Yosemite National Park was a state of being “alone with others” (p. 3), wherein visitors consciously and unconsciously engage in symbolic and non-symbolic interactions with others—and, more often than not, experience no negative side effects. Crowding, then, can not be taken for granted. It is a culturally charged perception — one that reflects the legacy of Boone’s frontier mentality as much as it does ecological or managerial realities.

² The most recent estimate is a population of approximately 349 million to 371 million by 2050, due to decreased birthrates and immigration (Sen, 2024).

³ Two popular destinations in California and New York respectively, United States.

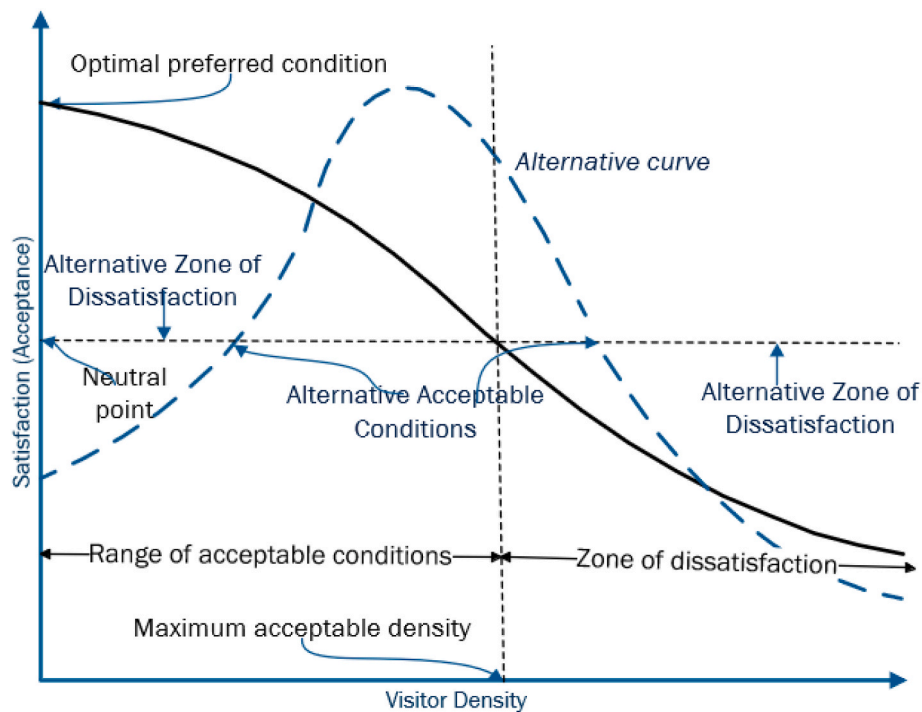


Fig. 1. Manning's assumed structural social norm curve of individual visitors (adapted from Manning, 2022). *This default/baseline model in solid line assumes that the optimal, or preferred, social condition is when no others are present and that quality of the experience degrades with each additional visitor in the park, or area. The alternative is in dotted blue line indicating the acceptable visitor density is in a confined range. (For interpretation of the references to color in this figure legend, the reader is referred to the Web version of this article.)

4. The conceptualization of a collective experience

It is critical to state that we do not dismiss the validity of crowding research or the benefits of use limits under some conditions. Research clearly demonstrates that unmanaged density can degrade natural resources and the experience of some visitors (Manning, 2022). Congestion is, in economic terms, a "negative externality" (user cost). When a trail becomes a queue, data indicates that the dense conditions undeniably degrade the experience for many. But it is important to reiterate that density is objective; Crowding is a subjective, normative evaluation of, and the psychological reaction to, that visitor density—not the density itself. Recently, tourism and recreation researchers proposed the concept of functional density to describe the experience of busy conditions in parks that positively impact experience (Budruk et al., 2002; Mowen et al., 2003; Wickham & Kerstetter, 1999). A higher density may enhance visitors' experience and enjoyment by providing a sense of security, social vibrancy, and "people-watching" opportunities (a possible alternative curve in Fig. 1), as hypothesized by Wagar (1964, p. 7). We argue, however, that denser use conditions in national parks may yield something other than just enjoyment, but a collective experience and sense of *communitas*.

To this end, think of a quintessential setting in the U.S. national parks: the campground and, more specifically, the social experience of the campfire circle. Hogue (2023) describes the early national park camping experience in the U.S. as a social setting, rich with ritual: "... these bonfires were not explicitly meant for cooking but instead fulfilled a broader, symbolic mission The evening campfire was a major social event, a place for arriving visitors to meet and mingle" (p. 66). They play a very different role than the small campfire pits available in individual campsites, "which played more purpose-driven" and "utilitarian" roles (p. 68). Dissecting the national park campground experience even further, we begin to see patterns and social behavior emerge that are akin to pilgrimage tourism (Ross-Bryant, 2013). Yard muses that one "sits around the evening camp fire with a California grape grower, a

locomotive engineer from Massachusetts, and a banker from Michigan." "Perhaps for the first time, one realizes the common America—and loves it" (Yard, 1922, p. 583). Ross-Bryant (2013) points to a campfire scene, like that described by Yard, as a manifestation of Turner's (1969) "*communitas*": a "transformative experience that goes to the root of each person's being and finds in that root something profoundly communal and shared" (p. 138), an experience reliant upon liminality, or liminal spaces, to arise. National parks are very much liminal spaces, where most people come temporarily as visitors, and "the social differences so insisted upon at home just don't exist" (Yard, 1922, p. 583). Here, spontaneous *communitas* manifests — whether around the communal campfire, along the trail, or on a tour of a historic home. In these experiences, social structures break down, norms of the workaday world fade, and a new, fleeting set of social norms and connections emerge. In these instances, Yard "marvels at the total absence of what we call sectionalism" (1922, p. 583). Thus, we contend that the shared national park experience results in spontaneous and existential *communitas*—"a spontaneous feeling of mutual communion among pilgrims" (Di Giovine, 2011, p. 248).

As a result, we posit that experiencing national parks in the presence of many others, such as taking in the view of the Grand Canyon at Mather Point with several hundred others, is often a positive, shared, and collective experience. It is not only additive to an individual's experience but also defines it. The experiences extend beyond the normative social conditions simply rated on a scale from 1 (not at all crowded) to 9 (extremely crowded; Vaske, 2019). Instead, there appears to be something deeper, elevating, even spiritual, at play. More than functional density, this experience is to be cherished, made possible by the presence of others and the shared, modern, and secular pilgrimage to national parks.

However, visitors may not view everyone else on the trail or at the overlook through the lens of *communitas*. In Vogt's understanding of crowding, those *other* visitors are too many—those visitors who don't belong to this space: less skilled in the outdoors, with different skin

colors, or who don't speak our language. They consume national parks and wilderness in alternative ways, different from *our* way. Thus, we argue that the traditional concept of crowding is also rooted in the view of one "right way" to experience nature and wilderness—that is, being solitary and adventurous in nature—and provides a particular lens through which we view the social conditions in national parks. Thus, the crowding concept may have served as an othering mechanism: similar to a lowered highway underpass on the way to a state park, which prohibited the passage of a bus filled with colored and low-income people (Caro, 1974). The concept, measurement, and assumption of crowding (many times inadvertently) serve as social and structural barriers that undermine certain groups of people from accessing national parks.

5. Collective experiences for a diversifying collective

We posit that the increased diversity in the visitor population in the United States and around the world, along with their different cultural norms, necessitate a different conceptualization of the psychological impact of visitor density. The nation's population is more multiracial and diverse than ever before (U.S. Census Bureau, 2021a). Minoritized individuals are expected to constitute a majority of the population between 2042 and 2045 (Frey, 2016; U.S. Census Bureau, 2017). However, research consistently documents that members of racial and ethnic minority groups tend to visit national parks at substantially lower rates than whites (Weber & Sultana, 2013). Only 23% of visitors to the parks were people of color, despite minorities comprising 42% of the U.S. population (Resource Systems Group & Wyoming Survey and Analysis Center, 2019).

These stark disparities in the demographic reflect deeper cultural and social gaps in how different groups experience these spaces, and how outdoor recreation is culturally conceptualized and experienced historically as a western ideal. As evidence, surveys showed that a higher percentage of African Americans (11%), Asians (11%), and Hispanics (8%) reported receiving poor service from National Park Service employees at notably higher rates than white visitors (3%) (National Park Service, 2009). These visitors possess different cultural values. For example, Latino visitors demonstrate more socially motivated patterns in their visitation compared to other groups (Gómez, 2006). Community-based approaches to outdoor recreation are more culturally resonant to Latino visitors than solitary wilderness experiences (Juarez, 2020). In a similar vein, African Americans' relationships with outdoor recreation spaces emphasize a collective memory and community-based experiences that challenge traditional individualistic approaches to wilderness engagement and demonstrate a preference for group-oriented outdoor activities (Johnson, 1998). In addition, family-centered and community-oriented approaches to outdoor recreation are central to many Asian Americans' cultural traditions (Asian American Health Coalition, 2023; Pew Research Center, 2023), suggesting that cultural identity and community connections remain central to how Asian Americans engage with recreational spaces.

For these "sociocentric" visitors, an empty trail might not feel "pristine"—it might feel unsafe or lonely, devoid of camaraderie. For them, the presence of others may provide a sense of safety, shared joy, and validation of their outdoor leisure identity. However, when the minority population is small compared to the main group of white visitors, their possible unique experience, evaluations, and feedback are drowned in the ocean of mainstream evaluations. When averaged, the monotonic relationship between visitor density and the feeling of crowding on the social norm curve still dominates on the graphs and charts of many research reports.

In conclusion, the traditional framing of national parks as spaces for solitary contemplation may be fundamentally at odds with the more communal, family-oriented recreational traditions of many whose participation could be enhanced rather than diminished by the collective experience among visitors.

6. A new framing of the relationship between visitor density and experience

Past studies offer ample evidence that different visitor groups have different preferences for physical visitor density under different contexts and cultural backgrounds (Chavez, 1993; Vaske and Donnelly, 2002; Vaske and Shelby, 2008). We propose that the optimal levels of visitor density depend on the visitor archetypes (e.g., motivations, cultural backgrounds, etc.) and the context (i.e., location) where the recreational activities take place. To illustrate (Fig. 2), borrowing from Hofstede's cultural dimensions, countries and cultures can be placed on a spectrum of individualism—collectivism dimension (Hofstede, 2001). We argue that the optimal level of visitor density will depend on the visitor archetypes on this spectrum: visitors from individualistic cultures are more likely to prefer a lower visitor density than those from collective cultures. Similarly, as posited by Schreyer and Driver (1990), visitors' motivations may be placed on a spectrum of solitude-dependent (anti-social) to intergroup-dependent (pro-social). This follows the assumption of Wagar (1964), that the impact of visitor density on visit quality is a function of visitors' motivations.

On the other hand, the optimal visitor density will also depend on where the recreational activities take place. Following the Recreation Opportunity Spectrum (ROS; Clark & Stankey, 1979), the same visitors will anticipate a higher density in urban and developed areas but prefer lower visitor density in semi-primitive or primitive settings when engaging in recreational activities. Thus, the two dimensions, visitor archetypes and the ROS type, will determine different optimal visitor density levels (Fig. 2). A visitor from a collective culture camping in a backcountry campground may prefer a bustling social atmosphere—replete with others to relish in the grandeur and share the evening. In contrast, a visitor from individualistic culture camping in a wilderness area will prefer being alone by oneself. Similarly, a visitor motivated to achieve more social outcomes (e.g., affirm their leisure identity through community, experience a shared heritage, find belonging, etc.) is more likely to prefer denser use conditions at an overlook in a national park, while a visitor motivated by outcomes more associated with introspection, self-reliance, and escaping society will more likely prefer less dense conditions. However, our infatuation with "crowding" has defaulted our focus to the visitor group in the bottom-left corner (Fig. 2). Of course, as an illustration, these two dimensions cannot capture all the visitor types and contexts where recreational activities may occur, but depicting all possible visitor types and contexts is beyond this paper.

In practice, there is no "one-size-fits-all" criterion for all visitors (Shafer, 1969), and we probably should not manage national parks as such. Furthermore, we may need to design national parks with certain features to encourage inter-group communication between diverse visitor demographics. This can create a positive sense of community and reduce visitors' biases and stereotypes (Powers et al., 2022). The collective experience sought after by certain visitors under certain contexts are the manifestation of *communitas*. However, managers cannot create *communitas*; they can only foster conditions where it might develop such experience. Fostering this experience has to start with the current management frameworks. We propose integrating this concept and approach into two established frameworks: Limits of Acceptable Change (LAC) and the IVUMC framework in the United States.

The LAC framework (Stankey et al., 1985) focuses on defining desired conditions rather than simply counting visitors. The nine steps in LAC framework include a process of identifying area issues and concerns, defining and describing opportunity classes, selecting indicators of resource and social conditions, identifying management actions for each alternative, and implementing actions and monitoring conditions (Stankey et al., 1985). Traditionally, LAC defines "social conditions" using indicators like "encounters per hour," where lower numbers are synonymous with higher quality. We propose expanding the LAC process to include positive social indicators. For example, in Step 1 (identify area concerns and issues) we could recognize that for certain areas (e.g.,

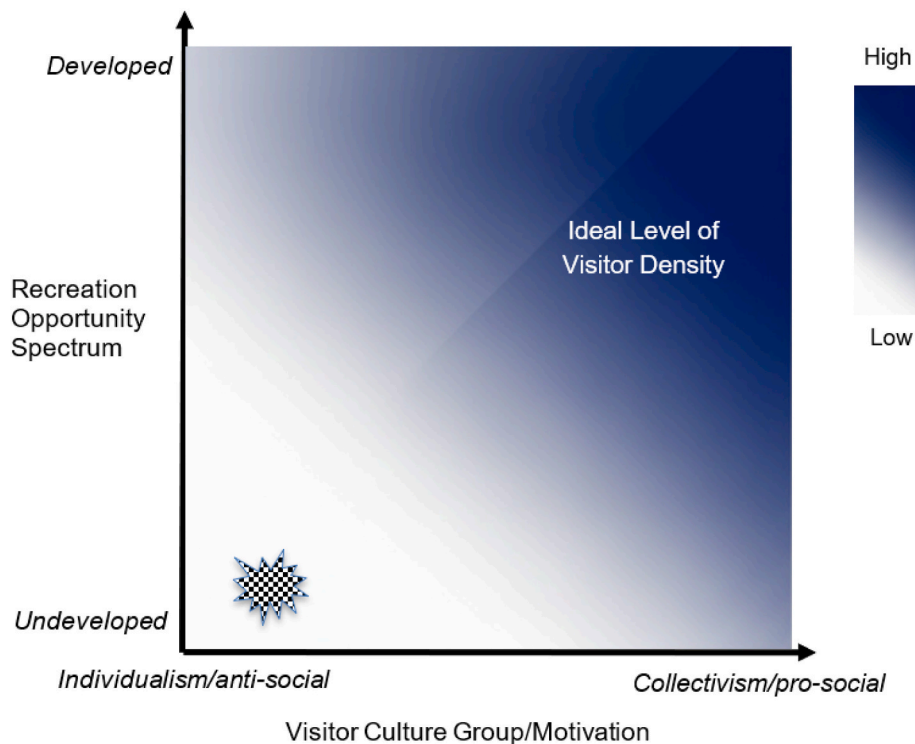


Fig. 2. The Crowding-Communitas Spectrum: A conceptual framework for the determinants of optimal visitor density. *The default as the assumed ideal level of visitor density is illustrated with the checkered marking.

front-country plazas, amphitheaters), social interaction is likely to be a desired value. In Step 3 (select indicators), instead of only measuring negative encounters, managers could measure positive interaction potential. Indicators could include: "Opportunities for inter-group mingling," or "Visitor perception of safety/social vibrancy." In Step 5 (specify standards), in a "Semi-Primitive" opportunity class, the standard might remain "fewer than 3 encounters per hour." However, in a "Rural/Developed" zone, the standard might be inverted: "Minimum density required to support communitas and perceived safety."

The IVUMC framework is a four-element iterative cycle of planning, implementing, monitoring, and adjusting (Interagency Visitor Use Management Council, 2016). Through fourteen steps, it allows managers to learn by doing. In several steps of this process, collective experience could be considered. Step 3 (assess current conditions) might include a visitor survey that asks about visitor motivations (including pro-social motivations) and experiences of communitas, while asking about evaluation of density in more objective terms than "How crowded did you feel on the trail today?" In Step 5 (define desired conditions), prioritizing opportunities for communitas alongside solitude, when appropriate, would serve to recognize not just a variety of desired experiences, but also a variety of potential benefits to be attained by visitors. Adding both minimum and maximum thresholds to social densities in Step 7 (select indicators and establish thresholds) would similarly help recognize multiple visitor archetypes.

7. A research agenda

This proposed conceptual framework of the Crowding-Communitas Spectrum will require more rigorous empirical testing. We propose the following directions for future research.

1. Developing new indicators: Researchers could develop valid scales to measure "communitas" in park settings and move beyond single-item, biasing "crowding" scales.

2. International comparative studies: How does the perception of "crowding" differ between individualistic cultures and collectivist cultures? We hypothesize that preferred use conditions are culturally dependent variables. Either in the United States or in other countries, researching and comparing the different perceptions of different cultural groups will be a fruitful direction.
3. Pre-post studies: Designing collective experience through engineering (e.g., building communal campfire circles in national park campgrounds or developing shared cooking areas in backcountry campsites, where safety allows) offers an opportunity to examine how such developments change visitor experience outcomes.
4. Experimental design: There is a clear need for more field experiments assessing how controlled visitor densities relate to various visitor outcomes and how these outcomes vary across settings.

8. Conclusions

We began this paper by arguing that the definition of a "quality" park experience has been too narrowly framed through an assumption of crowding codified in park practice and policy. We then traced the origins of the concepts of crowding and carrying capacity, revealing their historical roots. Of course, the statement "national parks are a collective experience" is a provocative one, and we intend it to be so. We acknowledge that increasing visitor numbers can degrade the ecological systems and local community, and at times, we need to limit them for resource protection, visitor experience, and community well-being. However, we should cease the use of visitor experience as justification unless hard evidence is provided showing that a broad swath of the visiting public perceives themselves to be crowded and crowding is degrading their experience. We can no longer assume that increasing visitor use numbers is destined to lead to crowding. Returning to Vogt (1943), we posit that assumptions regarding crowding, beyond legitimate concerns for natural resources and local community, are often implicitly or explicitly made based on *who* is in the park and *who* the dominant culture believes to belong elsewhere.

Through a review of empirical research and conceptual development, we demonstrate that the assumed structural social norm curve and the classic visitor density-crowding-dissatisfaction model—long-disproven (Kuentzel & Heberlein, 2003; Manning, 2022; Manning & Ciali, 1980; Shelby & Heberlein, 1986) but still guiding prevailing assumptions—are neither universally valid nor culturally inclusive. As the U.S. becomes more multi-racial and multi-cultural, the norms of what constitutes a "quality" park experience evolve. For many visitors from collectivist cultural traditions or simply motivated by non-solitude-oriented aims, the presence of others contributes to and helps define an elevated recreational experience. Rather than continuing to frame social encounters in parks as mere problems to be managed, we propose a new paradigm that acknowledges the richness of shared experiences, appreciates the emergence of more inclusive communities, and incorporates diverse visitor diversity levels into the very fabric of how we conceptualize and measure the national park experience. This is not a new idea (Lee, 1977; Yard, 1922), but one we could return to.

By integrating the concept of collective experience, the future of national parks lies not in preserving solitude as the default ideal, but in providing a spectrum of opportunities where every American can find their place, including witnessing wonder together, not apart.

CRedit authorship contribution statement

Bing Pan: Writing – review & editing, Writing – original draft, Visualization, Methodology, Investigation, Data curation, Conceptualization. **William L. Rice:** Writing – review & editing, Writing – original draft, Validation, Investigation, Formal analysis, Conceptualization.

Impact statement

This research provides a transformative framework for the U.S. national park system and the broader tourism industry by redefining visitor density as a potential source of "communitas"—shared joy and social connections. By challenging the traditional focus on solitary wilderness, this work offers actionable strategies to make public lands more inclusive and accessible for an increasingly diverse and "socio-centric" population.

Practically, the paper provides specific guidance for park managers to integrate positive social indicators into established management tools, such as the Limits of Acceptable Change (LAC) and IVUMC frameworks. This shift allows for the design of park environments—such as communal campfire circles—that foster a sense of collective experience and social vibrancy. Ultimately, this research promotes social equity and cultural belonging, ensuring national parks remain relevant and welcoming "collective experiences" for all Americans.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

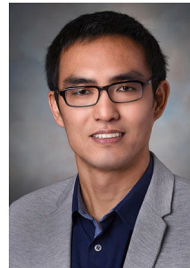
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