The Roles of an Urban Parks System

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July 2016

Overview

This paper explores the current roles of urban parks systems to further define the roles and to demonstrate the benefits that these spaces have on individual and community wellbeing. The collection of park spaces within an urban municipality is defined as an urban parks system. Urban parks systems play a critical role in achieving the objectives of the following public sectors: Culture; recreation; community development; heritage; economic development; health and wellness; natural environment; education; and transportation. These roles have evolved significantly over time from the inception of urban parks and are becoming more important as the population increasingly shifts from rural to urban. Understanding the roles of urban parks today in the context of each sector helps integrate them and guides planning and management of the system.

Introduction

Urban parks are generally seen as valuable assets; however, the only quantifiable value attached to urban parks is sometimes seen as their capital and maintenance costs. Parks, like most elements of publically provided services, are not directly profitable and thus the justification for investment is not always clear. The recreational activities that take place in parks can also be hard to define and accurately quantify. The assets in parks and the activities facilitated by an urban parks system are commonly seen as very important to a community but without an understanding of their roles and values to the community, planning and managing them to optimize their services is challenging.

Historically the value of urban parks is well founded. Parks were created for a variety of reasons as settlements grew incorporating public squares, sport fields, fair grounds or simply public landscaping and beatification efforts. There are many examples of the parks system being established into an entity prior to the formal incorporation of the town or city. The reasons for creation of parks space was clear and important enough to the growing town to provide these social gathering open places. Today some municipalities are required by legislation to enable the provision of park space and dedicate a percentage of land in new developments.

The roles of parks have evolved as our urban municipalities become larger and society and lifestyles are trending from rural to urban. Understanding the importance of the parks and the various roles they have in urban society is becoming more important so parks can remain positioned as a critical public service and an integral part of the urban fabric of society. A study of urban parks' historical significance is simply not enough to define relevance of today's urban parks systems. Focusing on one or just a few roles of the parks system rather than comprehensively understanding and management will yield less than optimum benefit of this valuable urban resource.

Each of the following sections presents an area of focus in which urban parks systems (the collection of park spaces within an urban municipality) play a role. Some roles may be glaringly obvious while others are not. No matter how obvious the roles may be perceived, they must not be assumed as common knowledge; in fact they must be showcased to be fully understood. Examples of park components and amenities are provided in each section to show relevance to the responsibilities of parks managers and planners in each of the municipal roles.

Urban Planning

The evolution and planning process of urban parks systems differs from municipality to municipality. The department tasked for planning urban parks in a community must realize the magnitude of the responsibility bestowed upon them. Parks are much more than land put aside from development, they must be designed and animated to positively form the public's sense of place. A well balanced inventory of park spaces and amenities is required to ensure all roles of parks are being met. The sum of each individual park within a municipality creates an urban parks system, including both constructed parks and protected natural areas as well as the linkages between them.

Planners need to fundamentally understand the role and accrued benefits of a park space when considering specific design elements and how to best incorporate the park into its surrounding built and/or natural environment. The size of the park, the configuration and spacing of the park's components, maintenance practices, and landscaping amongst various other factors are to be considered. The preference of features vary depending on the society.[1] The ability of the park space to create a sense of place is often overlooked but is perhaps the most critical element that should be considered in planning. Sense of place is referred to in the context of exteriority as a sense of the ambiance or atmosphere of a given park or in the context of interiority as a sense of community belonging.[2] The concept of public space is important for planners to understand and believe

in as public spaces are areas of the city in which all citizens can access; especially citizens with the greatest needs (e.g. low income, seniors, persons with disabilities).[3] Aesthetics are also considered when attempting to create a welcoming environment.

A park can be the most welcoming place in the city if designed properly, therefore, planners must create parks consciously. Planners should take a step back and thoroughly discuss what they want the public realm to be like. The behavior of residents, impressions left upon visitors, overall levels of happiness, and leisure are some of the philosophical topics that planners should be debating; parks should be included in these debates. Solutions to municipal issues are not initially looked for through urban parks, but perhaps they should. Planners should understand the roles of urban parks systems to ensure their presence and function is optimized.

As previously identified, urban parks play a critical role in the delivery, facilitation, and contribution of culture; recreation; community development; heritage; economic development; individual and community health and wellness; natural environment; education; and transportation. In essence, urban planners must consider all these roles when shaping a municipality's future; decisions made regarding parks impact all these topics. Providing a well-rounded inventory of park components and amenities to provide the appropriate mix of parks within an urban parks system is a challenge for planners.

Culture

Urban parks systems play a role in culture. Parks encourage culture though many different avenues including, but not limited to, art, music, performing arts, festivals, and history. Having cultural amenities and spaces in a park will contribute to a community's sense of place.

Urban parks are often a venue for outdoor concerts and theatrical performances. Such performances attract a broader range of spectators than if the show was indoors and creates a highly memorial experience. "Shakespeare in the Park" performances and festivals present just one example of a popular cultural event that is occurring in many urban centres. Free musical performances in public spaces create new perceptions of place and points of gathering in public spaces, thus re-emphasizing (or initiating) a vibrant public sphere.[4] Because urban parks systems are more "open" to the surrounding environment, the use of these spaces for performances and concerts increase residents' perceptions of a community's cultural vibrancy.

Public art displays are commonly featured in urban parks. These range in size, functionality, and form but ultimately are geared towards achieving the same purpose of increasing aesthetic appeal and vibrancy. Art in a park is inclusive and can be appreciated by anyone regardless of financial means. The aesthetics of art add to the beauty of the city, specific neighbourhood, and public space in general. Featuring art in urban parks is a method to showcase local culture, stimulate creativity and self-expression, and even generate political or social conversation.[5]

Art can be interpreted in different ways, which stimulates social interaction between parks visitors and is a facilitator of meaningful social interaction and encourage dialogue.[6]

An example of successful integration of art and parks in Alberta is Central Memorial Park in Calgary. Throughout the park space are art installations that contribute to a sense of place in Calgary and provide residents and visitors with a place for reminiscing, learning, and leisure.

In addition to displaying artwork, a park also facilitates the creation of art. Parks that offer venues and supports to artists and art organizations often gain new vitality through the artistic happenings that result.[7] Parks provide a setting that encourages creativity, innovation, and artistic expression. In fact, large companies incorporate park elements such as trees, greenspace, and water features into their work environments to stimulate their employees' creativity and overall wellbeing.

Parks are a venue for festivals. Festivals usually have a purpose whether it be to promote and celebrate a specific culture or a range of cultures. Not only do festivals attract spending, they also shape a new urban image and act as a driving force behind cultural creativity and social cohesion.[7] The pride of the culture is strengthened and the opportunity to learn about other cultures is presented. Attendees are able to connect to other cultures by understanding similarities to their own culture. If such a festival took place indoors or somewhere confined, bypassers would not feel as welcome to casually walk in and check it out as opposed to the openness of a park. Having these events in an already determined shared sense of place increases exposure and visitation.

Passive cultural integration happens spontaneously in urban parks. The same benefits emerge as festivals but these integration opportunities are always available and accessible. A park that is a well designed to achieve a sense of place is welcoming and inclusive to all. The open atmosphere of a park enables casual opportunities for interaction and making community connections between park visitors. People with diverse cultural backgrounds can connect and interact in a shared park environment.[9] These spontaneous connections are a significant contributor to a cohesive neighbourhood. A well connected neighbourhood has benefits to an urban society that extend well beyond the interactions that occur initially in a park.

Great examples can be taken from urban parks around the world which can spark new ideas and identify best practices. Many countries and major cities have or are increasingly looking at parks as an important place of solitude for residents and visitors. Some urban parks in China are carefully designed to be places of reflection and this is achieved in the planning of procession of space, plaza areas, and vegetation.[10] In Chinese gardens, plants are carefully selected for their symbolic association and installed to dictate the arrangement of spaces. The idea that a garden should invite aesthetic appreciation and the enjoyment of nature is important to Chinese park visitors, but may not be limited to a single culture.

Parks play a critical role in providing cultural opportunities to local residents as well as attracting visitors. Culture infrastructure in an urban parks system sets the municipality apart by providing identity-defining features and iconic places. An example of this is the Greek Theatre in Los Angeles' Griffin Park. The municipality owns and operates the 5,900 seat outdoor bowl, offering a variety of performances including some free shows. The park is a vibrant gathering point and attracts visitors from all over the world.

It is not realistic for every municipality to have a Greek Theatre, however the role of urban parks systems is to provide accessible and meaningful cultural opportunities. These spaces invite inclusion by providing places for everyone as residents and visitors of all cultures, ages, and abilities can use playgrounds, attend festivals, and participate in art programs and other shared activities, breaking down stereotypes and prejudices.[9]

Recreation

Similar to culture, parks cater to a wide range of recreational pursuits. Recreation is very broad term as its definition also encapsulates cultural activities previously mentioned. In the Framework for Recreation in Canada, recreation is defined as the experience that results from freely chosen participation in physical, social, intellectual, creative and spiritual pursuits that enhance individual and community wellbeing.[11] Many "freely chosen pursuits" are dependent upon the availability of parks and their amenities.

Parks offer passive, spontaneous, and structured recreation opportunities. A few examples of passive recreation activities that take place in parks include relaxing, social gatherings, reading, observing wildlife, walking, photography, or simply just enjoying the surroundings. Taking time to slow down and relax alleviates stress, especially when a freely selected leisure activity is being participated in.[12] Trees, open turf areas, natural areas, picnic tables, and benches are amenities utilized for passive recreation opportunities.

Spontaneous recreation broadly categorizes physical activities in which the activities, the nature of participation, and the timing are freely chosen and do not require registering for a program or a league. This includes walking, running, children playing, skateboarding, shinny and other pick-up sports games, and countless other activities. Some of the benefits of participating in spontaneous recreation activities include increased life expectancy,[13] reduced rates of depression,[14] and the fostering of a stronger sense of community.[15] Urban parks and pathways are platforms for promoting an active lifestyle and without the accessibility of urban parks systems, the opportunities for spontaneous recreation would be greatly limited in most municipalities. Trends suggest that recreation interests are evolving in such a way that favours spontaneous participation over structured as well as individual activities over team sports.[16] Many informal pursuits can be done alone or in small groups, at flexible times, for less cost, and are available closer to home.[17] Parks must remain accessible and inclusive to afford all residents the opportunity to participate in their desired activities and to formulate a positive sense of place and belonging.

Infrastructure for spontaneous recreation in urban parks vary in magnitude from gravel trails to mountain bike skills parks, open turf areas to rectangular fields, and from flat concrete pads to skateboard parks. Technically, any space could be utilized for scheduled programming, however planners have to anticipate that certain uses will occur and design the components accordingly.

Other amenity examples for spontaneous recreation include tennis courts, basketball courts, soccer goal posts, diamond backstops, playgrounds, beach volleyball courts, skating ovals, and multi-use paths. Skateboard parks are an interesting example of both a recreational and cultural amenity as they are now becoming designed to complement the existing park features; almost as an art installation itself. The Forks Skateboard Plaza in downtown Winnipeg was designed to aesthetically please all park visitors by not only incorporating trees, planters, and public art, but by designing the skateboarding features themselves in a unique and attractive way.

Structured recreation, including organized sport, is often synonymous with the image of North American parks. Ball diamonds and rectangular fields are often placed in parks as they are primary sites for organized sport; many municipalities have policies that ensure ball diamonds and rectangular fields will be incorporated into new parks. Many of the component examples that were listed for spontaneous use apply for structured use as well (e.g. tennis courts, basketball courts, beach volleyball, ice rinks). The only difference is in how they are programmed.

A number of benefits[18] arise from participating in structured recreation pursuits including social benefits, positive affective outcomes which encourage physical activity over the life course,[19] and teen athletes are less likely to use illicit drugs, smoke, or to be suicidal.[20] Deficiencies in physical literacy is becoming an issue as some children are not developing a well-rounded repertoire of physical abilities. Physical literacy is the ability to move with competence in a wide variety of physical activities in multiple environments that benefit the healthy development of the whole person.[21] Provided in parks are free and accessible areas for children and youth to develop. Parks play a role in ensuring opportunities for residents to engage in all types of recreational pursuits.

Sport venues in parks cater to the wide spectrum of athletic skill levels from recreational to elite. Developing elite athletes may not fall within the scope of a municipality. Municipal parks systems do however play a crucial role in providing facilities for the initial development of interest and skills. This is important for developing future elite athletes, but more importantly for providing all citizens the opportunity to gain the skills necessary to be active throughout the course of their life. Parks are often the site in which people are introduced to sports and become interested in developing their skills and abilities.

Sport tourism is another concept that can be facilitated in urban parks through design and operations. Sport tourism is defined as any activity in which people are drawn to a particular location as a sport event participant, an event spectator, or to attend sport attractions or business meetings.[22] Such events range from professional games to youth tournaments. People travel from all over the world to participate in and watch the International

Triathlon Union's world tour event in Edmonton's Hawrelak Park; without a park venue such as Hawrelak, the City of Edmonton would likely not host a triathlon of that magnitude. These events bring spending to the local economy and build a stronger sense of place and community pride.

Certain sporting venues have become normalized in North American parks systems in response to public demand decades ago. There is nothing particularly wrong with this, however as demographics shift, so do demands. Emerging sports such as cricket and kabaddi must not be ignored, especially if community groups are looking for a place to recreate. The commonly prescribed rectangular fields and ball diamonds may not be suitable for such emerging activities.

Defining the "right" mix of recreational amenities in an urban parks system is not an easy task. Unlike indoor recreation facilities, it is difficult for park managers to track all the uses, and number of users, that their urban parks accommodate. Defining data sets and collecting usage information requires resources and may not be statistically reliable, making park management challenging. Nonetheless, an understanding of what is happening in urban parks is critical and can still be accomplished effectively to some degree. User engagement, both with the public and user groups, is a method to gather feedback on urban parks to measure overall satisfaction and to plan for new park amenities.

The successful provision of urban park systems requires all stakeholders, departments, and residents to be engaged in the planning of these spaces. Ultimately, the right mix of spontaneous and structured spaces need to be strived for. Urban parks systems must balance a variety of activity desires and provide opportunities for all residents to recreate.

Community Development

Community development refers to the community itself engaging in a process intended on improving the social, economic, and environmental situation of the community.[23] Parks are a great platform for this. Specific amenities are not applied directly to encourage community development, rather it is the recreation and cultural venues previous discussed that, in turn, lead to community development.

The benefits of culture and recreation experiences contribute to community development. Socializing, volunteering, friendships, civic pride, preserving history, and appreciating one another's differences are just a few examples of the way activities in parks relay into community development. Participating in recreation through urban parks and open spaces creates leadership development opportunities that build strong communities, social capital, and social cohesion.[24] Motivations to engage in leisure activities include socializing with friends and to meet new people as leisure activities instill a sense of belonging.[25] Parks are venues for a limitless amount of activities to take place in which a sense of belonging is searched for. If an individual achieves that sense of belonging, the environment in which it was achieved is internally developed into having a strong, positive sense of place.

People with diverse cultural backgrounds can connect and interact in a shared park environment.[9] Parks are the site of many great experiences, friendships, and lasting memories. Without parks, where can we access such a broad range of recreational or cultural activities?

Even without specific amenities, just the fact of having areas without access barriers can make everyone feel welcome. Planners must strive to create parks free of barriers. Often the population that needs the most help in terms of community development are those facing financial, social or accessibility barriers.[26] Parks can help mitigate these barriers by creating safe and inclusive spaces for residents facing these barriers. In fact, parks can help reduce many of these broader social barriers by providing spaces that encourage skill and social development. If parks are a site for communities to engage in self-driven initiatives, then access must be upheld for all.

Another role that parks can play, with proper design, is public safety. Parks that make an area feel safer contribute significantly to community development. Parents feel more confident in letting their children play in parks that are safe and are perceived to be safe.

The more a park is used the safer the area is perceived. A study was conducted to understand the correlation between park use and safety. The findings indicate that there is in fact a significant relationship between park use and safety of the area; therefore, either parks engender safer communities, or communities have to be safe for people to use the parks.[27] Ensuring parks are appealing and accessible to a variety of interests will increase user numbers. Alternatively, if parks are not as well-used then it is even more important to design parks well in order for them to be perceived as safe. Understanding the role of community development and the perception of safety in a community is important to understand so the parks system can be designed and managed accordingly.

The development of children and youth is a large factor in community development. Access to parks is important for youth to engage in a variety of activities, especially at-risk youth and vulnerable populations. As parks are a place for play and social interactions, the experiences had at parks lead to healthy development. Children are the next generation of leaders and parks play a vital role in ensuring the community is healthy for years to come.

Community development is such a wide-ranging term that this section probably has not even scraped the surface of how parks play a role. As discussed in the introduction, we all know that parks are important but it is not easy to explain why. Park users experience a higher sense of membership in the community and a higher sense of safety over non-users which furthers the argument for park advocacy.[28] Community development may be the answer we are looking for and needs to be understood when designing and managing an urban parks system.

Heritage

Perhaps one of the more fundamental roles of urban parks is preservation of a community's history. In fact, many existing urban park spaces were developed on or around important historical sites and are often named based on this association. Preserving and further developing the historical aspects of an urban parks system embed the importance of these spaces within the community and increase resident interest and utilization.

Showcasing the history of a community via its prominent community builders and significant events from the past are an important part of community development. Promoting historically significant people and events gives rise to celebrating the history in a variety of ways. Remembering the legacy of individuals and events grounds members of a community and serves as a reminder that individual and group efforts make a difference for the future.

Many municipalities name parks after individuals from the past to preserve and recognize their contributions. While the park design or function may not directly correlate with the legacy of the individual, the community is drawn to remember and gain an appreciation of their heritage. While a named park may not replace a museum there is often interpretative information and the public space aids in the celebration and remembrance of the heritage of the municipality.

Important to consider in the conversation around the role of heritage features in urban parks is that, like art, heritage is highly subjective. As such, it is important to balance heritage features and characteristics of urban park spaces.

Individual and Community Health and Wellness

Currently only one percent of the total healthcare budget is devoted to the primary prevention of chronic illness and injuries, yet these conditions account for 90 percent of the illness burden.[29] If governments plan to address this issue, parks should be positioned to play a leading role. Parks and recreation departments are too commonly viewed as peripheral rather than core community services but major issues such as sedentary lifestyles and obesity are becoming a financial burden on society; therefore, it has been argued that parks and recreation should be repositioned as health care providers.[30] The amount of funding that is invested into preventing health issues is under invested. Parks need to be positioned as preventative health care facilitators or enablers, which needs to be understood better by the public through improved communications and advocacy initiatives.

The physical wellness and health benefits of parks are an easier "sell" as active living opportunities are generally seen as a way to improve physical health, which has been well proven through widely accepted research.[31] Mental health is not as easy to understand as physical health, however mental health benefits and physical activity have been proven to positively correlate.[32]

In addition, non-physical leisure activities such as meditation and reading are therapeutic and beneficial as well[33] and also important to consider in the discussion around the roles of urban parks. Parks are a primary place for relaxing and hanging out. Getting away from the busy city and de-stressing is an important escape from busy routines. A better understanding of the health benefits derived from using parks needs to be studied and promoted.

Physical inactivity is a major health risk. Active participation in recreation is a prevention measure and the greatest gains in active living are occurring in outdoor environments.[34] Urban parks and open spaces provide a solution to the stress and contribute to a sense of wellbeing. Connecting with nature is associated with improved cognitive, mental and physical health, enhanced creativity, and positive social behaviours.[35] Although more research is required to further prove some of these associations, the public understanding is already in place; 78% of Albertans realize that recreation can help reduce the burden on the healthcare system.[36] Australia has successfully promoted the intuitive understanding of the connection between parks and health in the "Healthy Parks, Healthy People" campaign. Other parts of the world have similar campaigns promoting the strong correlation between health and parks.

Investing resources into the prevention of health issues will reduce health care costs in the long term. If more health care investment was allocated to prevention, urban parks should be a leading candidate for resources as they are accessible and open for a variety of activities and environments to accomplish many of the benefits of society adopting a more active lifestyle. Moving the needle in this regard will require further understanding into the comprehensive health benefits of providing urban parks and a more uniform effort to concisely articulate these benefits. Perhaps the first step in the articulation is the collection of utilization data and usage metrics of parks in a community, which, as previously discussed, is not an easy undertaking.

Economic Development

Significant investment is required to operate parks. The costs to operate and maintain the parks system can be easily quantified and the limited revenue generated by urban parks does not nearly offset the investments made. The return on investment comes in the form of the many social benefits.

Unfortunately, social benefits are impossible to objectively quantify into a dollar figure. However, this does not mean that parks have a negative impact on municipalities' financial situations; the business of parks must be understood on a greater magnitude.

Urban parks systems are an essential piece to the financial sustainability of a city. Since municipalities generate revenue from residential and industry taxes, the general goal is to have people living (residential tax) and working (industry tax) within the municipality. In order to attract residents to live in a certain area, the area has to be appealing. The primary reason for an individual or family to relocate to another city is probably for employment, but when looking for a specific area to settle down, the surrounding

amenities will be considered. Also, if employment in an emerging community is growing, new residents will be demanding park and recreation amenities. To attract people to a city, a positive first impression is advantageous; opportunities for one's self and their family are important. Parks play a large role in attracting and maintaining residents and this can be accomplished if there are a variety of cultural and recreation opportunities.

Battery Park in Manhattan's downtown financial district was strategically planned in the 1950s to attract Wall Street employees to live closer to the area. Lower Manhattan was primarily composed of businesses and there was not a large population of residents. The business leaders in the Wall Street area established a committee to formulate strategies to encourage their workers to live closer for the sole purpose of being able to work longer hours. A comprehensive strategy was established to develop and maintain Battery Park green space and to develop residential towers surrounding the park. Leisure spaces were an important part of the plan and the Hudson River Waterfront (Battery Park) was promoted as "Lower Manhattan's greatest recreational amenity."[37] Branding for the residential area uses the word 'park' to its advantage. The neighbourhood is referred to as Battery Park City which is much more appealing to potential residents than Battery City. This example of planning was led by the private sector because the business leaders understood the benefits of parks and used them to their advantage. The same understanding is used to create new or redevelop existing neighbourhoods successfully.

Quality of life, measured in part by urban green space is a determining factor in real estate values and economic vitality.[38] Property values are higher if the property is located adjacent to a park or if it has a view of it; this results in more tax revenue. Residential properties located near an amenity such as a park will attract a higher capitalized value than properties that do not have access to such an amenity; the higher level of capitalized value will result in higher property taxes, which in theory, is sufficient to pay for the annual costs related to the development and maintenance of the amenity.[39]

Another way parks play a role in the local economy are their impact to local businesses. Businesses located next to an urban park benefit from pedestrian traffic and flourishing businesses are an indication that the city is doing well. Large events inside a park (e.g. marathons, sporting tournaments, multi-cultural festivals) attract out-of-town visitors. The influx of visitors will bring spending to local businesses including hotels and restaurants. These businesses may even wish to invest in certain park amenities to help attract visitors.

Corporate sponsorships in public parks is a strategy to generate revenue; it is also a topic in which varying opinions conflict. The sponsorship of parks can occur in a number of ways such as park naming rights, amenity naming rights, and advertisements. A study[40] was conducted to gather people's opinions on corporate sponsorships in parks. A variety of opinions were gathered and the findings were categorized into three themes (positive, negative, and advice for pursing sponsorships). Positives included monetary benefits, service benefits, business/consumer benefits, and community benefits. Negatives identified were the sense of ownership is jeopardized, worries regarding the

impact on park settings and facilities, altered user experience, commercialization, and potential conflict of interest with certain sponsors. Advice for pursuing sponsorships included: Proceed with caution; find a balance; do not lock into long term deals right away; important for the public to understand what the sponsor is providing such as new equipment, park areas, upgrades, etc.; and certain areas of a park may be more appropriate to sponsor than others.

Lastly in regards to economic development, parks departments employ residents. The United States' National Parks and Recreation Association (NPRA) published a report titled: The Economic Impact of Local Parks. The report states that America's local and regional public park agencies generated nearly $140 billion in economic activity and supported almost one million jobs from their operations and capital spending alone in 2013.[41] Whether directly or indirectly, parks play a significant role in economic development and more attention should be brought to this.

Natural Environment

With the world's population becoming increasingly urbanized, people's connection to nature is decreasing. Urban parks play a critical role in connecting people to nature. Connecting people to nature is one objective and preserving nature is another. Although these objectives work together in balance, they also conflict. We must further our understanding of this role before some of our precious spaces become developed, overused, or abused.

Urban parks come in many shapes and sizes and are either designed or natural. Large parks and park systems such as Vancouver's Stanley Park, Lethbridge's River Valley, and the Edmonton region's river valley system play a critical role in preserving the natural environment. These parks contain flourishing ecosystems from forests to wetlands and are home to a variety of species that rely on the protection of the park. There are many examples of sensitive natural areas within urban municipalities that have been put aside for preservation.

Natural areas can also be used for recreational activities both passive and active, such as hiking and mountain biking. Differences in opinions exist between preservation and utilization. Each park is different and examination on a case-by-case basis may be warranted. It is important for each municipality to define the balance between use and preservation and arrive at a balance for the sustainability of nature based recreation.

Getting residents to appreciate their local urban parks (creating a stronger sense of place) translates into caring for the greater environment as well through increased pro-environmental behaviours.[42] This is especially true for youth as their values can be influenced easier. Evidence has been gathered that youth participation in outdoor recreation leads to values in conservation throughout adulthood.[43]

The term "urban forest" has been adopted to reflect the critical role trees play in making an urban municipality livable. The urban forest is comprised of trees in both landscaped parks and natural

parks as well as along streets and roadways. Environmental benefits of the urban forests are realized as they counter air pollutants, conserve energy through cooling and shade, reduce wind, buffer noise, house wildlife habitat, increase property values, and improve aesthetics.[44] For these reasons, trees may be the most important park amenity.

Urban parks systems play a role in promoting the natural environment through community gardening programs. These programs present a unique and educational opportunity that connects people with nature. The fundamental experience of planning a garden, preparing the soil for planting, caring for the plants through the season, harvesting, and ultimately eating the food produced provides a fundamental or grassroots connection to nature. Due to its complete experience, community gardening provides a connection to nature that can be more powerful than visiting and sightseeing in vast natural park spaces.

Climate change is becoming a popular topic for urban municipalities and it is now a standard consideration in decision making and policy formation. Whether they realize it yet or not, municipalities play a huge role in introducing their residents to the natural environment. Encouraging residents to appreciate their local urban parks translates into caring for the greater environment as well.

Education

Urban parks are a platform for education. Continuing on the topic of the natural environment, urban parks are a great place for hands-on learning experiences. Targeting children and youth for nature education is critical in influencing the next generation of leaders to take care of their environment. Interpretive centres, such as Lethbridge's Helen Schuler Nature Centre, are an example of a park component that is dedicated to educating the public and students. These facilities can also play the critical role of building appreciation for urban park spaces which has lasting impacts.

When it comes to urban parks, physical education is a perfect match. In some cases schools will have their own park space while some schools are located next to a municipal park. In either case it is imperative that teachers and students have access to parks for their physical education programs. Rectangular fields are the most common park amenity as they can be used for traditional sports such as soccer and the simplicity of a rectangular field affords many uses and programming opportunities. Ball diamonds are also common in North America for school usage. Introducing sport and recreation activities in school is an excellent way to expose children to a variety of pursuits that they may not have the opportunity to participate in otherwise. Some families cannot afford to put their children in recreation programs so schools face the responsibility of introducing programming in parks. Municipalities play a role in ensuring that parks are accessible and maintained for school usage. Joint use agreements between school boards and municipalities provide formal structures to ensure that maximum benefits for students and the public are being achieved.

Playgrounds, although not often used for structured programming, should continue to accompany schools and be provided throughout the community as they are a primary site for young children to experience social interactions among peers. Playgrounds provide children the opportunity to develop gross motor development including activities involving the use of the whole body. Physical fitness activities increase the degree of strength, flexibility, balance, endurance, co-ordination, and cardio-vascular fitness in children. Sensory and motor skills are developed with activities which develop abilities to retain and recall information as well as hand-eye tasks. Social interaction skills are developed on playgrounds when activities are participated in that utilize or encourage group involvement. Conceptual and emotional response skills are also developed while using playground equipment. Playgrounds are an important amenity for education in regard to childhood development. Children are smarter, more cooperative, happier, and healthier when they have frequent and varied opportunities for free and unstructured play outdoors.[45]

Some non-physical education teachers take their classes to parks once in a while to change up the learning environment. Research has shown that going outside helps the learning process.[46] Whether through structured programs or spontaneous play, students and adults alike learn in urban parks. History is an example of a subject that adults often learn about at parks.

New school developments are suffering from financial restraints and some components have started to be cut back on (e.g. gymnasiums, playgrounds) and municipal urban parks may begin to play a larger role in education in the years to come.

Transportation

In 2011 in Canada, 5.7% of commuters walked to work regularly while 1.3% cycled, accounting for over one million Canadians.[47] Active transportation refers to any form of human-powered transportation, such as walking, cycling, using a wheelchair, in-line skating, or skateboarding.[48] A generational trend is that younger professionals are using active modes of transportation more now than ever. A number of factors are contributing to this such as people are becoming more environmentally conscious, financial limitations are more considered (active transportation is generally a cheaper mode of transportation), and a trend is occurring in which people are moving back from the suburbs into urban communities in which places of work are closer in proximity to place of residence.

A number of benefits are perceived to arise from active transportation such as physical and mental health benefits. Physical activity becomes a lifestyle and is incorporated into the daily route as opposed to finding the time and budget to fit it into the schedule, it does not directly impact the environment negatively as vehicles do, and it is potentially safer. Reducing the carbon footprint and increasing face to face interaction are also benefits of active transportation. Active transportation such as walking and cycling is becoming more prevalent and urban parks systems play a major role in maintaining the momentum of this trend by providing desirable routes of travel.

Urban parks systems provide opportunities for active transportation, however the quality of the route is important and cannot be overlooked. Urban parks encourage active traffic through its boundaries especially if they are adjacent to a roadway or can provide a shortcut through the community. Pathway systems that connect neighbourhoods across the municipality are becoming increasingly important to accommodate alternative methods of transportation. Multi-use pathway systems are often seen as being a given with park design as they facilitate a wide range of recreational use and serve a transportation function.

Not having these connections increase the travel distance, hence discouraging people to walk or bike, increase the need for driving, and unless every road has adequate bike lanes, the potential for accidents increases with more bike traffic.

Active transportation is good for people of all levels of income but especially for those who cannot afford a vehicle. Offering quality opportunities to use active modes of transportation assist people financially and allow them to allocate their personal budget to other essential item needs. Active transportation corridors increase individual and community wellbeing.

Stating that parks play a role in transportation is fairly obvious. Designing and managing to optimize the effectiveness of the transportation role is challenging and cannot be done effectively without data documenting use. Assessing the areas of high utilization and understanding why a pathway is well utilized may help in the planning of other areas. The amenities on pathways and user numbers, lighting and its effects on night usage, the surface material and the types of usage (e.g. bicycling, walking), and other relationships should be constantly analyzed to enhance pathway systems. These strengths can be applied to other corridors that do not attract as much active traffic volume. Gathering data is the starting point.

Gathering as much data as possible and understanding the movement of people will not only help planners continue to encourage the use of active transportation corridors through parks, it will also make the justification for such park amenities to be incorporated an easier task. As active transportation becomes a more focused subject in transportation studies and municipal discussions, the parks and transportation sectors should ensure that parks are top of mind as being a key stakeholder in the role of transportation.

Conclusion

Urban parks systems are much more than green space. They are critical assets that play key roles in a variety of areas. Most government departments will directly benefit from having a variety of quality parks in their urban parks system and some of these benefits are more obvious than others. Continued education and awareness must be promoted. The public generally views parks as important, but a greater understanding of the roles in which parks contribute will help guide planning and management of the urban parks systems.

The planning of urban parks systems, including individual parks, must be proactive and consider how to best use available land. The reclamation of brownfield sites into urban park sites, the development of complementary urban parks in new areas, and the continued refreshment of existing urban parks are all important considerations in the broader planning context. Also, it is important to consider the urban parks system as a whole in order to realistically accomplish all the roles that parks play.

An understanding of the role parks play in culture, recreation, community development, heritage, health and wellness, economic development, natural environment, education, transportation, and perhaps even other sectors is important. The conversation around the need for urban parks must continue to be comprehensive and multi-faceted. For this to occur, urban park advocates need to engage with a multitude of stakeholders and attempt to position parks as a critical element of the urban landscape. The justification for urban parks also needs to be conveyed in such a manner that considers multiple interests, potential benefits and future roles for urban parks.

The content of this paper provides a number of viewpoints, research references, and outlines an array of roles and benefits that can be achieved through the provision of urban parks. The ultimate role of urban parks systems is vast and, to some degree, should remain flexible and able to evolve. Identifying how urban parks systems play a role within other department areas helps increase their effectiveness in delivering services and providing for the needs of the community.

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