Understanding the Educational Potential of the Kashong Conservation Area: A Survey of Geneva Educators
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Introduction
The primary function of the Kashong Conservation Area (KCA) is for use as an educational and recreational site. One goal of the KCA is to serve as a resource for educators in the City of Geneva. The 86 acre area boasts a meadow, forest, wetland area, and a stream. Currently, trails and the removal of invasive species are in progress.

The purpose of this area report is to illustrate the potential use of KCA by educators in the Geneva area. Surveys were given to local educators at all teaching levels in order to capture the widest range of responses. Overall, educators have responded positively to the development of KCA and many will consider bringing classes to KCA. Many of the educators expressed that they were looking for an area that is close to Geneva, primarily because it would reduce the cost of traveling and saves time.

Methods
The Kashong Conservation Area Survey (Appendix A) was distributed to teachers at St. Francis-St. Stephens School, North Street School, West Street School, Geneva Middle School, DeSales High School and Geneva High School in the March. Surveys went out to the professors of Hobart and William Smith Colleges in February. In the elementary schools, parochial and private, all teachers were given the surveys because they teach all subjects. In the Geneva Middle School, Geneva High School, DeSales High School, and Hobart and William Smith Colleges, the questionnaires were given only to teachers or faculty that taught science. The number of responses from educators at each level were as follows:

- Parochial – 5
- Elementary – 12
- Middle School – 3
- High School – 2
- College - 9

Results
The majority of teachers agreed or strongly agreed that “students need to supplement classroom learning with outdoor field trips” (Figure 1). The one educator that strongly disagreed also did not have access to outdoor areas for fieldtrips. Educators across all levels disagree or strongly disagree that they “currently have access to outdoor areas for field trips” (Figure 2).
Specifically, most elementary school teachers disagreed or strongly disagreed that they have access to outdoor areas. Thirty out of 31 teachers would consider bringing their classes to KCA (Figure 3) and believe that development of KCA will benefit their teaching (Figure 4).
Figure 1: Students need to supplement classroom learning with outdoor field trips.

Figure 2: I currently have access to outdoor areas for field trips.
Figure 3: I would consider bringing my classes to KCA.

Figure 4: Development of KCA will benefit my teaching.

**Outdoor Field Trips**
Overall the majority of educators responding to this survey had taken students on science-related fieldtrips. Most parochial and elementary school teachers took students on trips that ranged from around the school to Taughannock State Park in Ithaca, NY. One of the five teachers that had not taken field trips stated that “field trip money is hard to come by.” Two out of three teachers had taken students on field trips as far as Boston.

Most college professors have taken students to natural areas, such as lakes, ponds, and creeks. The purpose of the field trips is to familiarize students with sampling techniques, data collecting,
and field experience. The faculty and students of Hobart and William Smith do not have as many obstacles as other educators because they have financial support from the Colleges that can be used for materials and travel.

**Criteria for Selecting Field Trips**
The common criterion among all educators is the relevance to course material or that it meet a curriculum standard. Also several individuals asked for a website and pictures in order to familiarize students with the area prior to arriving at the site. Teachers of younger students have expressed safety as one of their concerns. Ten out 31 educators listed accessibility and proximity as a primary criterion. The KCA is particularly beneficial because it is within 10 miles of Geneva City schools, parochial schools, and Hobart and William Smith Colleges. One of the teachers listed multiple criteria that seemed to reflect the sentiments of many others:

*Proximity; ease for buses to enter/leave; shelter for inclement weather; easily justifiable – close to Geneva City Schools; cost” (Middle School Teacher)*

**Activities at KCA**
The types of activities educators would like to do at the KCA varied greatly by grade level. The parochial and elementary teachers wanted to do a mix of hands-on activities, such as bug hunts, and observational activities, such as nature walks and changes in season. The middle school and high school teachers imagined studying the physical characteristics of the Kashong Conservation Area. On the other hand, some college professors would bring in tools to help students with sampling techniques to define the KCA biologically, chemically, and geographically. The following quotes are a few examples of activities teachers would like to do at the KCA:

*Giving the children the experience of a nature walk.* (Elementary School Teacher)

*Bug hunts, plants and trees, water life. It would just be a great outdoor resource a way to extend the classroom.* (Elementary School Teacher)

*Our children are not as aware as they should be (or not at all) of our natural resources locally. If we could ‘get out’ of the classroom – hands on, you’re talking memorable moments.* (Elementary School Teacher)

*Discussing how to come up with a management plan for conservation area.* (College Professor)

*Learning basic field sampling techniques; General appreciation of nature; Observing plants and animals.* (College Professor)
Table 1. Extent to which educators are already doing specific activities within their curriculum and activities they would like to do at the KCA. (includes educators at all levels)

<table>
<thead>
<tr>
<th>My Curriculum (#)</th>
<th>My Curriculum</th>
<th>At KCA (#)</th>
<th>At KCA (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tree Identification</td>
<td>7</td>
<td>23%</td>
<td>11</td>
</tr>
<tr>
<td>Insect Behavior</td>
<td>14</td>
<td>45%</td>
<td>11</td>
</tr>
<tr>
<td>Species Diversity</td>
<td>11</td>
<td>35%</td>
<td>11</td>
</tr>
<tr>
<td>Stream Ecology</td>
<td>5</td>
<td>16%</td>
<td>7</td>
</tr>
<tr>
<td>Plant Anatomy</td>
<td>16</td>
<td>52%</td>
<td>15</td>
</tr>
<tr>
<td>Pond Studies</td>
<td>8</td>
<td>26%</td>
<td>14</td>
</tr>
<tr>
<td>Wetland Studies</td>
<td>3</td>
<td>10%</td>
<td>9</td>
</tr>
<tr>
<td>Bug Collection</td>
<td>11</td>
<td>35%</td>
<td>12</td>
</tr>
</tbody>
</table>

Some of the other activities teachers mentioned were:
- Creating museum exhibits
- Orienteering
- Team building
- Nature writing
- Nature art
- Mapping

Resources at KCA
Educators of all levels are would need or find helpful are marked trails, maps and signs. Teachers of younger children would need money for bussing, pictures and tools. While a concern for all educators, elementary teachers most often expressed a desire for bathrooms onsite. Two out of eleven of the elementary public school teachers listed money for bussing as a valuable resource.

*Money is a MAJOR PROBLEM: Lack of district funding for field trips – both bussing + admission costs! We are not allowed to ask parents for field trips funding anymore. Grant funds to cover costs would be helpful.* (Elementary School Teacher)

The majority of parochial, elementary, and middle school teachers stated that adding ponds to KCA would increase the possible activities that they could do. Currently teachers include pond life, i.e. lifecycles of frogs and crayfish, in their curriculum. One parochial teacher stated that “I think it would be a wonderful addition. It would increase the plant and wildlife diversity in the area, thus increasing our options as educators.” Another stated:

*Most definitely. The seasonal change in pond life has many rewarding activities for teachers and students to explore. I never visit a site one time and feel that the learning is complete.* (Parochial School Teacher)

The high school teachers and professors from Hobart and William Smith Colleges did not think that the ponds would increase possible activities at KCA; however, they have access to ponds at the Hanley Preserve and Zurich Bog, which is likely why they did not express the same level of interest as other educators. That said, many college faculty did see great potential in terms of having the ponds for educational activities.
Conclusions
Since many of the elementary school teachers do not have access to outdoor areas, they would gain the most from the development of the Kashong Conservation Area. However, they may need help in creating or structuring lesson plans because most of them do not specialize in teaching science. The middle school and high school teachers may be more knowledgeable about teaching outdoor activities and lessons, but also seem to have more constraints on their curriculum. Out of the educators surveyed, college professors would be most likely to use the KCA because they are already using the Hanley Preserve and other natural areas.

The types of activities possible at the KCA vary greatly because of the diversity in biomes. Also, the higher the teaching level the more equipment that may be needed to use the area. For example, nature walks and nature observations have little or no cost, but equipment might be needed to measure water quality or collect other types of data. Whether or not that type of is supplied by the teachers or professors, it would be nice to have some equipment at KCA, such as microscopes or nets.

Ultimately, the KCA has enormous potential. In the future one can imagine a pavilion that might double as a classroom and a picnic area. Also, a reduction of invasive and non-native species would bring back native species of insects and birds. This would help reverse some of the effects of negligence experienced by KCA.

The goal would be to create a resource that provides access to students at all levels. At the same time, community groups and others could use the KCA as a setting for meetings or retreats. The design and nature of the KCA will continue to respond to the needs of educators, citizens and others in the Geneva community. We are excited about the growing vision of this new resource and will continue to work towards realizing its potential.

After a day at KCA students will leave having a greater appreciation for nature. They will be able to realize that nature is a classroom of its own.
Appendix A

Kashong Conservation Area Survey

Hello,
My name is Michelle De Leon and I am a senior at William Smith College. I am conducting a survey to better understand the educational opportunities created by the creation of a new nature conserve in Geneva. The Kashong Conservation Area (KCA) is a newly established natural area at the southern most boundary of the Town of Geneva, right off Rt. 14. The 86 acre area includes a forest, swamp, meadow, stream, and ravine. A number of community members and students are working to create trails and facilities that will make this nature preserve accessible to educators and students for academic and recreational purposes. The purpose of this questionnaire is to understand the education potential of this newly created nature conserve. We are asking you to fill out this questionnaire so we can better understand whether or not you see this area having potential use within your teaching or other educational endeavors with children. Please sign the attached consent form, which has been reviewed and approved by the Institutional Review Board at Hobart and William Smith Colleges.

A $50 gift certificate to the Hobart and William Smith College Store will be raffled off to those who complete this survey.

Name: ___________________________  Email address: ___________________________

School/College: ________________________________________________________________

Grade level and classes that you teach: ___________________________________________
   __________________________________________________
   __________________________________________________

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Don’t Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Students need to supplement classroom learning with outdoor field trips.</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>2.</td>
<td>I currently have access to outdoor areas for field trips.</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>3.</td>
<td>I would consider bringing my classes to KCA.</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>4.</td>
<td>Development of KCA will benefit my teaching.</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>
5. Have you taken classes on science-related outdoor fieldtrips? If so, where?

6. What are your criteria when selecting an area for outdoor fieldtrips?

7. Some of the ways I can imagine using the KCA with my classes or outreach sessions are:

8. Other than a classroom, are there any other facilities and resources that would be necessary or helpful for you to use the KCA?

9. Would adding ponds to KCA increase the type of activities possible for you at KCA? Why or why not?

10. I currently have the following in my curriculum:
    - [ ] Tree identification
    - [ ] Insect Behavior
    - [ ] Species Diversity
    - [ ] Stream Ecology
    - [ ] Plant Anatomy
    - [ ] Pond Studies
    - [ ] Wetland Studies
    - [ ] Bug Collection
    - [ ] Other: __________

11. The activities I would be most interested in doing with my students at the KCA are:
    - [ ] Tree identification
    - [ ] Insect Behavior
    - [ ] Species Diversity
    - [ ] Stream Ecology
    - [ ] Plant Anatomy
    - [ ] Pond Studies
    - [ ] Wetland Studies
    - [ ] Bug Collection
    - [ ] Other: __________