Establishment of Photographic Sites at Rum Hill

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INTRODUCTION: HISTORY AND METHODS

In 1971 Professors John G. New and Bruce R. Dayton of the biology faculty of SUNY Oneonta established a sequence of photographic sites at the Biological Field Station's Upper Site for the purpose of recording both seasonal and long-term vegetational changes (Haman 1977). These photographic series were taken regularly until Professor New's death in 1983 and resumed in 1991 by Professor William L. Butts and the chief photographer from SUNY Oneonta's graphic arts office, Mr. Charles Winters. Professors Butts and Dayton expressed interest in establishing a comparable sequence of photographic sites at Rum Hill after vegetational mapping was largely accomplished (Dayton et al., 1989). However, scheduling constraints prevented this activity until 1992, by which time the author had become familiar enough with Rum Hill to accept the charge of establishing photographic sites.

Accordingly, in the fall of 1992 the author surveyed Rum Hill from both on and off the trail system, selecting meaningful sites in typical habitats all over the property. Fifteen sites were actually given temporary tags during the winter of 1992-1993, with the plan eventually to give each site a permanent numbered aluminum marker like the lettered markers installed along the trails for avian observations (Sharick, 1992). A map of these sites is presented in Figure 1.

Professor Butts, Mr. Winters, and the author took the first set of photographs on June 22, 1993. The date was chosen to record the vegetation as close to the time of the summer solstice as possible. It is hoped that photographic sequences will be taken regularly in the future.

DISCUSSION: DESCRIPTION OF THE SITES

Table 1 presents the photographic sites in numerical order. The bearing or azimuth listed for each site indicates the direction toward which each picture will be taken. Following is a description of each habitat along the bearing line. References are made to bird observation points, trail segments, and trail circuits described in Sharick (1992).

Site #1, located near Point A on the Overlook segment of the Northern Trail Circuit, looks south-southwest across an old field between two stands of mixed hardwoods. The field is overgrown with small blackberry bushes (Rubus sp.), but some white ash (Fraxinus americana) seedlings have become established.

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Fig. 1. Location of photographic sites at Rum Hill.
Table 1.  List of Photographic Sites at Rum Hill.  The site numbers are keyed to the numbered circles in Figure 1.

<table>
<thead>
<tr>
<th>Site #</th>
<th>Bearing or Azimuth</th>
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<tbody>
<tr>
<td>1</td>
<td>205°</td>
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<tr>
<td>2</td>
<td>50°</td>
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<tr>
<td>3</td>
<td>165°</td>
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<td>4</td>
<td>210°</td>
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<td>5</td>
<td>310°</td>
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<td>6</td>
<td>220°</td>
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<td>7</td>
<td>125°</td>
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<td>9</td>
<td>85°</td>
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<td>13</td>
<td>175°</td>
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<td>14</td>
<td>215°</td>
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<td>15</td>
<td>20°</td>
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</table>

Site #2, near Point C on the Northern Trail Circuit, looks northeast across the adjoining property of the old field and meadow toward a swamp in which a beaver colony has actively maintained a dam in the drainage of the North Branch of White Creek since prior to the Field Station's acquisition of Rum Hill (Butts, 1987).

Site #3, marked near Point F on the Falls Brook Loop segment of the Northern Trail Circuit, looks south-southeast downslope through a forest of eastern hemlock (Tsuga canadensis) and mixed hardwoods. Many mature hemlocks have fallen on the north- and east-facing slopes at Rum Hill since winter of 1992-93, creating gaps and patches that will encourage the growth of hardwoods.

Site #4, located near Point I on the Traverse segment of the Northern Trail Circuit, looks southwest through a former old field now filled in with apples (Pyrus malus), hawthorn (Crataegus spp.), white pine (Pinus strobus), and young forest hardwoods.

Site #5 looks northwest across an old field at Point L-M, which is common to both the Northern and the Central trail circuits. Small blackberry bushes and hawthorn seedling have overgrown the field, which is rimmed by apple, pine, and young mixed hardwoods. As noted elsewhere (Sharick, 1992), this is till the only place at Rum Hill where butterflyweed (Asclepias tuberosa) grows.

Site #6 is located in a meadow facing southwest across the beaver pond complex, enlarged to overflow this low area of Rum Hill from an existing pond on the adjoining property in the fall of 1986 (Butts, 1986), on the South Branch of White Creek. The view is still open, with a ground cover of fern, sedge, and some willow (Salix sp.) seedlings. Across the ponds is a steep slope forested with mature hemlocks and hardwoods. Behind the photographic position, however, is a former pasture whose cover of large blackberry bushes has been almost
completely replaced since 1986 by a dense thicket of white ash saplings and a
ground cover of goldenrod (Solidago spp.) and dogbane (Apocynum sp.)

Site #7, marked between points A and B on the Homestead segment of the
Central Trail Circuit, looks east-southeast through a corridor between the brushy
vegetation along the beaver ponds and the wooded slope described in the bearing
line for Site #6.

Site #8, tagged between points C and D on the Alley segment of the Central
Trail Circuit, looks northwest downslope through mixed hardwoods and hemlocks,
where several large trees have fallen in the last year.

Site #9 is close to Point E of the Central Trail Circuit and looks east-
northeast downslope through mixed hardwoods. Several of the largest white
birches (Betula papyrifera) have fallen in the last year.

Site #10 is located within the forest bounded by the Alley, Homestead,
Centerline, and Greenway trail segments. It looks northwest upslope through
mixed hardwoods where recently fallen birches have created some openings in the
canopy. It is best reached by taking a bearing of 115° from Point F at the
intersection of the Greenway and Alley trail segments.

Site #11, marked near the above-mentioned Point F, faces east-southeast
downslope through mature mixed hardwoods.

Site #12 is located halfway along a new trail segment called the High
Traverse, which connects the Centerline trail segment at Point J with the steep
Highway trail segment along the western border of Rum Hill. The view is
southwest and upslope through a forest dominated by white ash and red maple (Acer
rubrum).

Site #13, located near Point I on the Centerline segment of the Central
Trail Circuit, looks south downslope through mixed maturing hardwoods.

Site #14, located near Point H on the Greenway segment of the Central Trail
Circuit, looks southwest into a former old field largely overgrown with apple,
hawthorn, white pine, and mixed young hardwoods.

Site #15 is marked at the edge of a beaver pond complex, begun prior to the
Field Station's acquisition of Rum Hill (Butts, 1986), along the Southwestern
Trail near Point Z. The view is north-northeast across the water to shrubby
vegetation, prominently red osier dogwood (Cornus stolonifera), hawthorn, and
mixed young forest hardwoods.

Included in the category of mixed forest hardwoods is the American beech
(Fagus grandifolia). As remarked by Dayton, et. al. (1989), local populations
of this species are heavily subjected to a blight called beech bark disease,
which has been steadily advancing south and west across North America since its
accidental introduction into Nova Scotia from Europe in 1920 (Shigo, 1975;
Miller, 1975). The pathogen is an ascomycete fungus, Nectria coccinea var.
aginata, that invades the feeding holes of the beech scale insect, Cryptococcus
fagisuga. The bark of infested beeches loses its normal smooth, light gray
appearance and erupts in rough, dark calluses as the trees attempt to wall off
the cankers from the still-healthy sapwood. Regular photographic series may well document the already noticeable and accelerating loss of beeches from the Rum Hill flora.

REFERENCES


