# Appendix E

Description of Archeological Sites and Location within Elkmont Historic District and Archeological Resource Impact Mitigation Recommondations

### E.1 DESCRIPTION OF ARCHEOLOGICAL SITES AND LOCI WITHIN THE ELKMONT HISTORIC DISTRICT

This appendix provides the detailed descriptions of the eight identified archeological sites found within the Elkmont Historic District. The sites are separated by topographic or drainage features and, in some cases, represent major historic subdivisions of the District. Each site contains both surveyed and unsurveyed areas, as well as one or more concentrations or scatters of prehistoric and/or historic artifacts, each of which is designated by a separate locus. The prehistoric and historic artifacts were recovered through limited surface collections and the excavations of shovel tests. These sites and loci are considered individual resources rather than potential contributing resources to the District; this is a result of the absence of a formal redefinition of the District. Because of the sensitivity of these resources and the need to protect them, the location information of each site is presented in only general terms. Mapped locations and further technical details are provided in the Section 106 report (Webb and Benyshek 2004).

#### Site 40SV120

Site 40SV120 is a multi-component prehistoric American Indian and 20th century historic period site found on the terrace and alluvial/colluvial hill slopes on the east side of Jakes Creek in the southern part of the District. This site includes the Daisy Town and Society Hill areas of the former Appalachian Club resort, and contains 48 standing buildings, 33 of which are considered contributing resources to the District (Cleveland *et al.* 2002). Work at this site included excavation of 186 shovel tests, including 164 on the terrace along Jakes Creek and 22 on the hill slope deposits east of the creek. Fifty-four (29.0 percent) of the tests produced prehistoric artifacts, while 63 tests (33.9 percent) produced historic period artifacts. The positive shovel tests have been grouped into four loci.

Locus A. Locus A at site 40SV120 contains prehistoric and historic period artifacts and deposits. Thirty-four (50.0 percent) of the 68 shovel tests in Locus A produced a total of 210 prehistoric lithic artifacts. Although no temporally diagnostic artifacts were recovered, the predominance of quartz and quartzite and absence of ceramics suggest that most if not all of these artifacts date to the Archaic period. Many of the shovel tests encountered disturbed soils, but other shovel tests show some degree of stratigraphic integrity. Despite the obvious historic period modifications to this area, the data suggest that prehistoric deposits may maintain some degree of stratigraphic integrity in parts of this area. Based on these results, it is recommended that additional investigations be conducted to gather a larger sample of artifacts and further evaluate the prehistoric deposits in this area prior to any disturbance that might extend beneath A horizon soils, which are typically about 20 centimeters thick across the area.

Thirty-three (48.5 percent) of the 68 tests in Locus A produced a total of 205 historic period artifacts, all of which appear to date to the 20th century occupation. Most of these materials are distributed as a generalized sheet midden, but artifact concentrations were found in three areas. It is recommended that two of those three areas be avoided or further evaluated prior to ground-disturbing activities.

**Locus B.** No prehistoric artifacts were recovered from the 14 shovel tests excavated in Locus B, but four (28.6 percent) of the tests produced a total of 25 historic period artifacts. This deposit appears to be a generalized sheet midden, representing the entire period of historic occupation in this area, and there are no indications of significant artifact concentrations or deposits. Consequently, no additional investigations of those deposits are recommended and no further work is recommended for this part of the site.

Locus C. Eleven (17.7 percent) of 62 shovel tests in Locus C produced a total of 24 prehistoric artifacts. Although no diagnostic artifacts were recovered, most if not all of those artifacts presumably date to the Archaic period. Most of the shovel tests encountered disturbed profiles. This fact, along with the low artifact density and clear evidence of extensive historic period modifications, suggest that most or all prehistoric deposits in this area have been extensively disturbed by historic period activities. Consequently, the prehistoric materials in this area are not considered to be of substantial research value.

Twenty-one (33.9 percent) of the 62 shovel tests in Locus C produced a total of 397 historic artifacts. Of those, 273 (68.8 percent) were recovered from a single shovel test, which encountered an intact pit feature that probably represents a pit or privy that was filled in the 1920s or 1930s. As a discrete refuse deposit associated with the early years of the Elkmont occupation, this feature has the potential to provide a variety of data concerning the material culture and lifestyles of the Elkmont inhabitants. Consequently, it should be protected from any ground-disturbing activities in this area.

Locus D. Nine (40.9 percent) of 22 shovel tests in Locus D produced a total of 101 prehistoric artifacts, primarily quartz or quartzite debitage fragments. Most shovel tests in this area encountered apparently undisturbed, fine-grained sediments extending to at least 70 centimeters below surface. Additional information on the archeological potential of this area is provided by a test unit, which encountered an apparent Middle to Late Woodland period pit feature at the base of the plow zone (A horizon). Based on these data, it appears that Locus D contains prehistoric deposits that can provide information relevant to a variety of research questions. Although investigations in this area were limited, the entire site should be considered high-potential for archeological deposits except for a few eroded or otherwise obviously disturbed areas.

Five (22.7 percent) of the 22 shovel tests in Locus D produced historic period artifacts. None are believed to represent significant deposits, although it is possible that more substantial deposits might exist elsewhere in that area.

Summary. Site 40SV120 contains a variety of prehistoric and historic period deposits, some of which appear to have appropriate integrity, clarity, and contents to provide information relevant to substantial research questions. Consequently, the site is recommended eligible for listing in the National Register of Historic Places and should be considered a contributing element to the District. If further investigation is not undertaken at these areas, the areas should be protected from future ground-disturbing activities associated with the proposed project or for other, unrelated projects. Other parts of the site do not appear to contain significant deposits, and no further archeological work is recommended in those areas.

#### **Site 40SV121**

Site 40SV121 is a multi-component prehistoric American Indian and 19th to 20th century historic period site on the west side of Jakes Creek in the southern part of the District. The site is located on terrace, alluvial/colluvial hill slopes, and upland landforms.

The combined survey at site 40SV121 included excavation of 12 shovel tests. Seven of the tests were excavated in the southern part of the site during the 2002 investigations; the other five tests were excavated in the northern area in 2004. Five (41.7 percent) of the tests produced prehistoric artifacts, while a single test (8.3 percent) produced historic period artifacts. The positive shovel tests have been grouped into two loci.

**Locus A.** Locus A is situated in the southern part of site 40SV121, and includes a standing stone chimney mortared and a stacked stone wall. A number of stone piles are present nearby and are probably related to the historic period occupation. Prehistoric and historic artifacts were recovered from one (14.3 percent) of seven shovel tests excavated in this part of the site. The investigations in

Archeology

Locus A were extremely limited, and did not define the boundaries of either the prehistoric or historic period components in the area. Additional work will be necessary to complete identification and evaluation of those resources should impacts be planned as part of the current project or any future work.

**Locus B.** Locus B is in the northern part of site 40SV121, on hill slope deposits. Four (80 percent) of five shovel tests excavated there recovered a total of 13 quartz debitage fragments. Artifacts were found in both the topsoil (A horizon) and the underlying B horizon. The work at Locus B was extremely limited, and did not define the boundaries or nature of the prehistoric component in this area.

Summary. The survey at site 40SV121 was extremely limited, and was not sufficient to characterize the resources in this area or to support a recommendation concerning the site's research potential or eligibility for listing in the National Register of Historic Places. In the event that impacts are proposed outside previously disturbed areas of this site, additional work is recommended to complete identification and evaluation of this resource.

#### **Site 40SV122**

This site is a multi-component prehistoric American Indian and 20th century historic period site located in the southeastern portion of the District. The combined survey at site 40SV122 included the excavation of 79 shovel tests. Fifteen (19.0 percent) of the tests produced prehistoric artifacts, while 35 tests (44.3 percent) produced historic period artifacts. The positive shovel tests have been grouped into four loci.

Locus A. Locus A at site 40SV122 is situated in the western part of the site, and includes both prehistoric and historic artifact distributions. Thirteen (43.3 percent) of 30 shovel tests in Locus A produced a total of 29 prehistoric artifacts, including a small ceramic sherd that probably dates to the Early to Middle Woodland period. The data indicate that low to moderate density intact prehistoric deposits are present in at least part of Locus A. The significance and research potential of those deposits cannot be determined based on the available data. Consequently, additional work will be needed to further evaluate those deposits prior to any ground-disturbing activities in that area.

Seventeen (56.7 percent) of the 30 shovel tests in Locus A produced historic artifacts. All appear to date from the early to mid-20th century, although none are highly diagnostic. Artifact density ranged from one to 16 artifacts per positive shovel test, with no clear pattern in the distribution of the materials. Nine of the 13 shovel tests that produced prehistoric artifacts also produced historic materials. The historic period artifacts at Locus A appear to represent a variable-density, secondary refuse deposit. Because of the redeposited nature of these materials and the inability to link them with specific cabins or activities, this artifact distribution is not believed to be of substantial research value. Consequently, no additional investigations, other than monitoring during any construction activities, are recommended in association with the historic component of this locus, as it is currently defined.

**Locus B.** Locus B at site 40SV122 is in the northern part of the site. Two (18.2 percent) of 11 shovel tests in Locus B produced single quartz debitage fragments; both were recovered from the A horizon. This low-density artifact distribution likely dates to the Archaic period, and is not considered to be of substantial research value or merit further consideration.

Four (36.4 percent) of the 11 shovel tests in Locus B produced a total of 15 historic period artifacts, all of which appear to date from the early to late 20th century. The historic period deposits appear to represent a variable-density sheet midden. Although these materials probably derive from activities in specific cabins, the deposits do not appear to have the potential to provide data relevant to substantive research questions, and are not considered to be of research value. Consequently, no

additional investigations, other than monitoring during construction, are recommended in association with the historic component of this locus, as it is currently defined.

**Locus** C. Locus C at site 40SV122 is situated in the eastern part of the site. No prehistoric materials were discovered in this area, but a moderate density historic period artifact distribution was identified. Twelve (52.2 percent) of 23 shovel tests in Locus C produced a total of 46 historic period artifacts, all of which appear to date to the early to mid-20th century.

The historic period deposits in this locus are clearly secondary in nature, but are of unknown origin. It is possible that some or all of these artifacts were included in fill that was deposited to raise the level of a roadway at some point during the resort-era occupation. Because of their redeposited nature and uncertain origin, these deposits do not appear to have the potential to provide data relevant to substantive research questions, and are not considered to be of research value. Consequently, no additional investigations are recommended in association with the historic component of this locus, as it is currently defined.

**Locus D.** Locus D at site 40SV122 is in the northern part of the site. No prehistoric materials were discovered in this area, but two (40.0 percent) of five shovel tests produced historic artifacts. These artifacts are not considered to represent a significant deposit, and no additional investigations are recommended in association with this component as it is currently defined.

Summary. Most of site 40SV122 remains unsurveyed. In addition to potential prehistoric resources, the site could contain historic period resources associated with four pre-Little River Lumber Company buildings or other logging or resort-era occupations. Data were not sufficient to characterize the resources in this area or to support a recommendation concerning the site's research potential or eligibility for listing in the National Register of Historic Places. Except as noted for individual loci, in the event that ground-disturbing impacts are proposed, additional work is recommended to complete identification and evaluation of the resource.

#### **Site 40SV123**

Site 40SV123 is a multi-component prehistoric American Indian and 20th century historic period site located in the northeastern portion of the District. This site lies outside the areas of dense development associated with the logging- and resort-era activities at Elkmont. The combined survey at site 40SV123 included the excavation of 10 shovel tests, all but one on hill slope deposits near a cabin. Five (50.0 percent) of the tests produced prehistoric artifacts, and the remaining five (50.0 percent) produced historic period artifacts.

Locus A. Locus A includes an area where prehistoric lithic debitage fragments were recovered from the surface during the 2002 reconnaissance. Because of the current land use, no shovel tests were conducted in part of the area. A single shovel test excavated on the ridge top to the west recovered no artifacts.

The work in Locus A was extremely limited, and did not define the boundaries of the prehistoric artifact distribution. Although the prehistoric deposits in one area are clearly highly disturbed, it is possible that intact deposits are present in the surrounding area. Additional work will be necessary to complete identification and evaluation of resources in that area should impacts be planned as part of the current project or future work.

Locus B. Locus B at site 40SV123 is located near a cabin, and produced both prehistoric and historic period materials. Five (55.6 percent) of nine shovel tests in Locus B produced a total of seven quartz and five chert debitage fragments. No diagnostic artifacts were recovered, but the relatively high percentage (41.7 percent) of chert may indicate the presence of a Woodland component. Although some of the tests encountered a thin layer of historic fill, debitage fragments were recovered from what appeared to be intact strata.

The work in this area was limited, and did not define the boundaries of the prehistoric artifact distribution or adequately assess its integrity. Although the area has been somewhat disturbed by the historic period occupation associated with a cabin, it is possible that intact deposits are present. If ground-disturbing activities are proposed in this location as part of the current project or future work, additional characterization would be necessary to complete identification and evaluation of this component.

The historic period deposits near the cabin appear to represent a low-density sheet midden similar to that found around other cabins at Elkmont. Although these materials probably derive from activities in this specific cabin, the deposits do not appear to have potential to provide data relevant to substantive research questions, and are not considered to be of research value. Consequently, no additional investigations are recommended in association with the historic component of Locus B as it is currently defined.

Summary. Site 40SV123 contains prehistoric components in at least two locations. The prehistoric deposits at Locus A and Locus B are poorly defined, and require additional evaluation to characterize the resources or support a recommendation concerning the site's research potential or eligibility for listing in the National Register of Historic Places. Both areas should be protected from future ground-disturbing activities, either related or unrelated to the present project. In addition, further investigations will be required should potential ground-disturbing activities be planned in other parts of the site.

#### **Site 40SV124**

Site 40SV124 is a prehistoric American Indian and 20th century historic period site in the northwestern part of the District The combined survey at site 40SV124 included the excavation of 24 shovel tests. Six (25.0 percent) of the tests produced prehistoric artifacts, and two (8.3 percent) produced historic period artifacts. Two artifact distributions have been identified.

Locus A. Seven quartz debitage fragments were recovered from two shovel tests in Locus A in 2002. No diagnostic artifacts were found, but the predominance of quartz suggests an Archaic occupation. The work in this area was limited, and did not define the boundaries of the prehistoric artifact distribution or adequately assess its integrity. Although part of the area has obviously been disturbed by construction, it is possible that intact deposits are present. Additional survey and site evaluation is recommended prior to performing any ground-disturbing activities.

The historic component of Locus A represents the remains of the former Elkmont sewage system, and consists of an earthen embankment with an associated array of concrete piers holding up an iron pipe running across the former pond area. In addition, a small number of ceramic artifacts were recovered from the surrounding area. The limited work conducted in this area did not adequately document the former sewage system and the associated deposits, and additional work is recommended prior to any ground-disturbing activities.

**Locus B.** Four (19.0 percent) of 21 shovel tests excavated in this area produced a total of four debitage fragments. No diagnostic artifacts were recovered. The intensive shovel testing has adequately assessed the prehistoric deposits in this area, which appear to lack research value. Consequently, no additional work is recommended.

**Summary.** Most of site 40SV124 is unsurveyed. In addition, the prehistoric and historic period deposits at Locus A are poorly defined and require additional evaluation to characterize the resources or support a recommendation concerning the site's research potential or eligibility for listing in the National Register of Historic Places. Locus A should be protected from future ground-disturbing activities, either related or unrelated to the present project. No additional work is

recommended as part of the potential construction in Locus B. Further investigations will be required should potential ground-disturbing activities be planned in other parts of the site.

#### Site 40SV125

Site 40SV125 is a prehistoric American Indian and 19th to 20th century historic period site in the western part of the District. This site is across the Little River from the former area of dense development associated with the Little River Logging Company logging town of Elkmont, and never experienced the degree of development that occurred in that area. At least three buildings were located on the site prior to the 1907 advent of the lumber company.

The combined survey at site 40SV125 included the excavation of 48 shovel tests. Seven (14.6 percent) of the tests produced prehistoric artifacts and seven (14.6 percent) produced historic period artifacts. Artifacts were also collected from the surface in two areas. The positive shovel tests have been grouped into six loci.

**Locus A.** Seven artifacts were recovered from two shovel tests in Locus A, including a chert Morrow Mountain projectile point (Middle Archaic period) and six debitage fragments. The work in this area was limited, and did not define the boundaries of the prehistoric artifact distribution or adequately assess its integrity. Additional survey and site evaluation is recommended prior to any ground-disturbing activities.

Locus B. Locus B is on a wooded rise on the terrace, and contains an early 20th century house site. Two (33.3 percent) of six shovel tests excavated on this rise produced a total of 10 prehistoric artifacts, including an apparent Late Archaic projectile point. Artifacts were recovered from the A horizon only. Work in this area was limited and although the boundaries of the artifact distribution appear to be defined by the landform, the investigations were not sufficient to assess the component's integrity or research potential. Additional survey and site evaluation is recommended prior to performing any ground-disturbing activities.

The historic component at this locus includes a square stone chimney base and an associated low-density artifact scatter. Sixty-five historic period artifacts were found in five (83.3 percent) of six shovel tests. The work in this locus was not sufficient to assess the component's integrity or research potential. Additional survey and site evaluation is recommended prior to any ground-disturbing activities.

Locus C. Locus C is north of Locus B, and contains low-density prehistoric and historic period artifact scatters. One (20.0 percent) of five shovel tests excavated in this area produced a single quartz debitage fragment from an apparent disturbed context. Although no attempt was made to delineate the boundaries of this locus, it does not appear to represent a significant resource as currently defined, and no additional investigations are recommended. However, additional survey would be necessary if impacts would potentially extend outside that corridor.

Two (40.0 percent) of the five shovel tests excavated in this area produced a total of 14 historic period artifacts. No attempt was made to delineate the boundaries of this locus, and it is possible that it represents a pre-campground occupation. Consequently, additional survey and site evaluation is recommended prior to any ground-disturbing activities in this area.

**Locus D.** Most of the prehistoric artifacts from this locus were found on the surface of a distinct rise. No shovel tests were excavated on the landform because it was outside the area potentially impacted by the management alternatives for the Elkmont Historic District. In addition to the surface artifacts, two quartz debitage fragments were found in one (25.0 percent) of four shovel tests excavated nearby. Those artifacts came from apparent fill. No attempt was made to systematically investigate or define the boundaries of the artifact distribution on the rise, and additional survey and evaluation would be necessary if it was to be impacted by ground-disturbing activities. The artifacts found

Archeology

adjacent to the road came from apparent fill deposits, and no additional work is recommended in that area.

Fifteen historic artifacts were found on the rise. The limited artifact collection is biased towards easily visible, potentially diagnostic items, but appears to represent a late 19th to early 20th century occupation. No attempt was made to systematically investigate or delineate the boundaries of this locus. Consequently, additional survey and site evaluation is recommended prior to any ground-disturbing activities in this area.

**Locus** E. Locus E is at the southern end of the site, where a debitage fragment was recovered from the single shovel test. Although this artifact came from an apparently intact context, it does not appear to represent the presence of a significant deposit within the survey corridor. No further work is recommended in that area, but additional survey and site evaluation is recommended if ground-disturbing activities extend to the north.

**Locus F.** Locus F is in an open area at the north end of the site, where a single wire nail fragment was recovered from one (20.0 percent) of five shovel tests in this area. This artifact does not appear to represent a significant component and no further work is recommended in the area.

Summary. Site 40SV125 contains five known prehistoric components and four known historic components, many of which require additional evaluation. A large part of the site remains unsurveyed, and additional prehistoric and historic components could also be present. Data were not sufficient to characterize the resources in this area or to support a recommendation concerning the site's research potential or eligibility for listing in the National Register of Historic Places. In the event that impacts are proposed outside the surveyed areas, additional work is recommended to complete identification and evaluation of this resource.

#### Site 40SV165

This site is on floodplain, terrace and hill slope landforms in the eastern part of the District. Most of the area is lightly wooded. The limited survey at site 40SV165 included 11 shovel tests. One (9.1 percent) of the tests produced prehistoric artifacts. No historic period artifacts were recovered.

**Locus A.** One (20.0 percent) of five shovel tests excavated in this area produced artifacts, all of which were found in fill deposits. The origin of these artifacts is unknown, but they clearly do not represent an *in situ* resource. Consequently, no additional work is recommended along the utility corridor in this area.

Summary. Most of site 40SV165 remains unsurveyed. In addition to potential prehistoric resources, the site almost certainly contains a variety of subsurface remains associated with the Little River Lumber Company and the town of Elkmont. Data were not sufficient to characterize the resources in this area or to support a recommendation concerning the site's research potential or eligibility for listing in the National Register of Historic Places. In the event that ground-disturbing impacts are proposed, additional work is recommended to complete identification and evaluation of this resource.

#### Site 40SV166

Site 40SV166 is on terrace, alluvial/colluvial hill slopes, and uplands. It is a newly identified prehistoric American Indian and 20th century historic period site in the northeastern part of the District. Most of the area is wooded, although there are some grassy and cleared areas adjacent to the buildings. The combined survey at site 40SV166 included excavation of 82 shovel tests. Fifteen (18.3 percent) of the tests produced prehistoric artifacts, and 27 (32.9 percent) produced historic period artifacts. The recovered materials have been grouped into four loci.

Locus A. Locus A is primarily on the upland ridge and adjacent slopes leading down to the terrace. Seven (15.9 percent) of 44 shovel tests in this locus produced prehistoric artifacts, consisting of a total of 16 quartz debitage fragments. Based on the predominance of quartz, the component presumably dates primarily to the Archaic period. The shovel test with the highest density of artifacts was one of two tests located on a distinct bench partway down the hill slope, where there is some potential for intact artifact distributions and perhaps features. Consequently, additional survey and site evaluation is recommended if ground-disturbing activities extend into that area. None of the other shovel tests excavated elsewhere on the ridge produced more than two prehistoric artifacts, and most encountered disturbed and/or eroded soils. Evidently, the intense historic period activities have disturbed any deposits that may have been present in this part of the locus. For this reason, no additional investigations are recommended in that area.

Seventeen (38.6 percent) of the 44 shovel tests produced historic period artifacts, which appear to represent a dispersed artifact scatter or sheet midden that extends across the entire area. All of the materials were found in the surface or A horizon, and there was no evidence of significant artifact concentrations or unmixed deposits. Based on this pattern, no additional work is recommended in the investigated part of this area, subject to the constraints and recommendations provided below.

**Locus B.** Locus B at site 40SV166 is on a narrow terrace at the base of a ridge. Four (66.7 percent) of six shovel tests excavated in this area produced a total of 10 prehistoric artifacts, including two ceramic sherds dating to the Woodland period. Artifact density ranged from one to six artifacts per positive shovel test, and the artifacts were recovered from depths of up to 100 centimeters below surface.

The prehistoric cultural deposits at this site appear undisturbed, and there is potential for intact Woodland period artifact distributions and perhaps features on this landform. Consequently, additional survey and site evaluation is recommended prior to any ground-disturbing activities in this area.

Two (33.3 percent) of the six shovel tests produced historic period artifacts. These artifacts were recovered from the upper strata, above the strata that produced the prehistoric artifacts. These materials appear to represent intermittent refuse disposal in this area, and are not considered to warrant additional interpretation.

Locus C. Locus C at site 40SV166 is situated on a terrace and parts of this area are maintained as lawn, while other parts are wooded. Four (10.3 percent) of 39 shovel tests excavated in this area produced a total of nine prehistoric artifacts. Essentially all of the shovel tests in this area encountered disturbed soils, and there is considerable surface evidence of ground disturbance and erosion across parts of this area. Based on the low artifact density and evidence of disturbance, no additional investigations of this locus are recommended.

Five (12.8 percent) of the 39 tests produced a total of 15 historic period artifacts. Artifact density ranged from one to eight artifacts per positive shovel test. These materials derive from one or more of the documented 20th century uses of this area, and there are no indications that they represent an intact deposit. Consequently, no additional investigations of this component are recommended.

**Locus D.** Locus D at site 40SV166 is situated in an area that was reportedly used as a septic drain field and as a refuse dump during the mid-20th century. Large numbers of historic period artifacts were observed eroding out of the riverbank at the west edge of this area, and three (42.9 percent) of seven shovel tests excavated above the riverbank also encountered historic period artifacts. No similar artifact deposits were encountered in Locus C, indicating that this deposit is limited to the Locus D area.

Archeology

This deposit appears to represent a secondary refuse deposit that can be associated with the 20th century use of nearby resort facilities. As such, it has the potential to provide data concerning activities that took place at the site. Additional survey and evaluation are recommended if ground-disturbing activities extend into this area.

Summary. Site 40SV166 contains three known prehistoric components and four known historic components, many of which require additional evaluation. Much of site 40SV166 remains unsurveyed and, in addition to potential prehistoric resources, it is possible that unsurveyed parts of this site contain additional intact remains associated with the Wonderland Club development. Data were not sufficient to characterize the resources in this area or to support a recommendation concerning the site's research potential or eligibility for listing in the National Register of Historic Places. Except as noted for individual loci, in the event that ground-disturbing impacts are proposed, additional work is recommended to complete identification and evaluation of the resource.

## E.2 ARCHEOLOGICAL RESOURCE IMPACT MITIGATION RECOMMENDATIONS

#### Archeology

This section provides specific recommendations concerning the potential archeological impacts associated with proposed management alternatives at Elkmont Historic District. The recommendations are organized by the principal types of ground-disturbing activities that could occur, including those associated with building restoration, removal, rehabilitation, preservation, and reconstruction; parking lot construction; and proposed water and sewer line improvements. Detailed recommendations concerning individual buildings and groups of buildings are provided as part of the site-specific recommendation for 40SV120, 40SV122 and 40SV166, and are summarized in Table B-1.

#### Building Removal, Restoration, Rehabilitation, and Reconstruction

The Elkmont project alternatives propose a variety of treatments for the historic buildings. These activities have the potential to impact shallow archeological deposits surrounding and beneath buildings, as well as associated landscape features. Any such activities carried out at Elkmont would take place in accordance with protocols developed to limit potential impacts to both natural and cultural resources and would include the following provisions:

- The potential disturbance area for the area of operation will be defined and surveyed (shovel tested) for archeological deposits. Monitoring or survey, as appropriate, will be conducted beneath the buildings if ground-disturbing activities, such as foundation removal, are required.
- Use of heavy machinery in the area, including traversing the area or setup, will not be permitted if significant deposits are present within the A horizon or plow zone. If buried deposits are present, the potential for impact will be assessed on a case-by-case basis. Factors to be considered include depth and type of deposits, and soil type. Installation of protective matting can be considered as a means to prevent impact from vehicular traffic.

#### **Parking Areas**

Alternatives B through F include proposed parking areas at several locations within the District. The following recommendations are made concerning these proposed improvements.

- Wonderland Hotel (Alternatives D, E, and F). The proposed parking area is on the ridge top east of the Wonderland Hotel. This area was surveyed, and no potentially significant resources were identified. However, monitoring is recommended during any ground-disturbing activities, because of the potential for discrete features associated with the former Wonderland Hotel.
- Elkmont Historic District Orientation and Day Use (Alternatives B, C, D, E, and F). Proposed parking is north of 434 Quarters. This area was surveyed, and no potentially significant resources were identified. With the exception of monitoring during construction, no additional work is recommended.
- Wonderland Overflow and Day Use (Alternatives E and F). This proposed parking area, which lies across the proposed new Little River bridge, was surveyed and no potentially significant resources were identified. With the exception of monitoring during construction, no additional work is recommended.

- Appalachian Clubhouse (Alternatives B, C, D, E, and F). These alternatives would include resurfacing of an existing parking area. This area was surveyed, and no potentially significant resources were identified. With the exception of monitoring during construction, no additional work is recommended.
- Day Use Lot for Daisy Town and Jakes Creek Trail (Alternatives B, C, D, E, and F). Proposed parking area is at the site of Cabins 12 and 14. This area was surveyed, and no potentially significant resources were identified. No additional work is recommended.
- Day Use Lot for Jakes Creek Trail (Alternative F). The proposed parking area is east of road. This area was surveyed. The northern part of the proposed parking area is eroded, and contains no significant or potentially significant resources. Additional resource evaluation is recommended prior to any ground-disturbing activities in the southern portion of the proposed parking area.
- Day Use Lot for Little River Trail (Alternatives B, C, D, E, and F). The proposed parking area would be along both sides of the Little River Trail. This area was surveyed. The part south of the trail does not contain potentially significant resources and no additional work is recommended in that area. For the northern part, additional resource evaluation is recommended prior to any ground-disturbing activities.

#### Road and Bridge Improvement

Alternatives D through F include road and bridge improvements within the District. The following specific recommendation is made concerning these proposed improvements.

Bridge Replacement (Alternatives E andF). Abutments for the bridge leading from the
Wonderland Club north across the Little River to the existing air quality monitoring station
potentially would be replaced. There are no indications that historic deposits extend into this
area. With the exception of monitoring during construction, no additional work is
recommended.

#### **Water System Improvements**

Alternatives B, C, D, E, and F include various water system improvements to support projects that range from increased day use through overnight stays at selected buildings. The following recommendations are made concerning these proposed improvements, and are provided by improvement type or water line segment.

- Wastewater Treatment Plant Expansion (Alternative E and F). The existing wastewater treatment plant northwest of the campground would be expanded and potentially could impact a 100-foot by 100-foot area. This area was surveyed, and because no potentially significant resources were identified, no additional work is recommended.
- Wonderland Club Area (Alternatives D, E, and F). A new water line is proposed. It would extend from the Park Quarters area, north and east along the inside (upslope side) of the road leading up to Wonderland Club, and continue along the south/east side of the road to the Paine cabin (# 58-2B). This entire corridor was surveyed and no significant archeological resources were identified. With the exception of monitoring during construction, no additional work is recommended.
- Wonderland Club Area and Campground Area (Alternatives D, E, and F). A new water line is proposed from the Park Quarters area, southeast along the south side of the road to the Little River Bridge. The entire corridor was surveyed. The only archeological resources consist of several chert artifacts recovered from fill, and are not considered significant. With the exception of monitoring during construction, no additional work is recommended.

#### APPENDIX E

- Campground Area (Alternatives D, E, and F). A new water line is proposed to cross the Little River Bridge and extend west along the north side of the road to an existing water line along the north-south campground road. The single artifact located along the water line corridor appears to be redeposited and has no research potential. Consequently, no additional work is recommended for this segment as long as construction is limited to the low area along the road.
- Campground Area (Alternatives C, D, E, and F). A new water line is proposed that would extend west from Jakes Creek Bridge at Daisy Town and then north to an existing water line in the campground. In addition, replacement of all or parts of the existing line running north from that point to the line along the north side of Elkmont Road leading to the line along the north-south campground road is proposed. The new segment extending from Jakes Creek to the existing line was surveyed and no resources were identified. Therefore, no additional work is recommended. Replacement of the existing water line within the previously disturbed corridor would not impact significant resources, and would avoid potentially significant prehistoric and historic period deposits. With the exception of monitoring during construction, no additional work is recommended in relation to water line replacement activities.
- Water Treatment Facilities area (Alternatives C, D, E, and F). New water lines are proposed from Jakes Creek west and then south to the water treatment facility. Unless these lines can be routed within previously disturbed areas within the road or along existing lines, additional work is recommended to delineate and evaluate resources. The small part of this line located at the base of the hill in this area would not impact any significant resources, and no additional work is recommended in that area.
- Daisy Town (Alternative B, C, D, E, and F). A new water line is proposed from Bearwallow Branch south through Daisy Town, and then west to Jakes Creek. This area was surveyed, and no significant resources were identified along the proposed corridor. With the exception of monitoring during construction, no further work is recommended.
- Society Hill (Alternative E and F). A new water line is proposed from Jakes Creek south through Society Hill to the McNabb cabin (#41). This area was surveyed, and no significant resources were identified. As long as the corridor is limited to its proposed location along the road and west of the terrace cut bank, no further work is recommended.
- Millionaire's Row (Alternative E and F). A new water line is proposed from Bearwallow Branch east to Little River Trail, and then south along the east/north side of the trail past the Cambier cabin (#49). The portion of this line from Bearwallow Branch to the proposed gate at the Cambier cabin (#49) was surveyed. The area west of the trail crossed by the proposed water line is not believed to contain significant prehistoric or historic period deposits and, with the exception of monitoring during construction, no further work is recommended. The portion of this line east of the gate at Cambier cabin (#49) will require survey if it is to be constructed.

#### **Sewer System Improvements**

Alternatives B, C, D, E, and F include various sewer system improvements to support projects that range from day use through overnight stays at selected buildings. The following recommendations are made concerning these proposed improvements.

• Wonderland Club Area (Alternatives D, E, and F). A new sewer line is proposed from the Park Quarters area north and east along the inside (upslope side) of the road leading to the Wonderland Club, and then along the south/east side of the road to the Paine cabin (#58-2B).

- This entire corridor was surveyed, and no significant archeological resources were identified. With the exception of monitoring during construction, no additional work is recommended.
- Wonderland Club Area and Campground Area (40SV165) (Alternatives D, E, and F). A new sewer line is proposed from the Park Quarters area southeast along the north side of the road to existing facilities adjacent to the Little River Bridge. The entire corridor was surveyed. Part of this corridor impacts resources identified from a discrete Woodland period occupation. The deposits there are considered potentially significant and additional evaluation is recommended prior to any ground-disturbing activities in that area. No additional work is recommended along the rest of this corridor.
- Campground Area (Alternatives C, D, E, and F). A new sewer line is proposed from Jakes Creek west and north to an existing sewer line in the campground. This segment was surveyed and no resources were identified. No additional work is recommended in association with this construction.
- Daisy Town (Alternatives B, C, D, E, and F). A new sewer line is proposed from Bearwallow Branch west to Jakes Creek. This segment was surveyed. Additional evaluation of one potentially significant historic resource is recommended prior to any ground-disturbing activities. No additional work is recommended in association with the remainder of this corridor.
- Daisy Town (Alternative F). A new sewer line is proposed from the McAmis cabin (# 34) south to the McNabb cabin (#41). This segment was surveyed. There is no potential for disturbance of significant archeological resources along the sewer line corridor, providing that all ground-disturbing activities are confined to the terrace below the alluvial/colluvial hillslopes. If this condition is met, no additional work is recommended in association with this corridor.
- Daisy Town (Alternative F). A new sewer line is proposed from the proposed new line along Jakes Creek Road to the Kuhlman cabin (#40). This segment was surveyed. There are no potentially significant resources along the far-western part of this segment that passes through a disturbed and eroded area in the north part of the proposed day use parking lot for the Jakes Trail area. However, the remainder of this proposed line traverses an area with potentially significant resources. Additional resource evaluation will be necessary in association with the near-western part of the proposed line.
- Millionaire's Row (Alternative E and F). A new sewer line is proposed from Bearwallow Branch east to the Little River Trail, and then south along the west/south side of the trail to the Cambier cabin (#49). The segment was surveyed and part of the proposed line contains potentially significant prehistoric deposits. Therefore, additional resource evaluation will be necessary in association with that portion of this segment. The remainder of the proposed line segment is not believed to contain significant deposits and, with the exception of monitoring during construction, no further work is recommended.

Table E-1: Recommendations Concerning Potential Impacts on Archeological Resources Because of Building Removal or Modification

Resource	Archeological Status	Recommendation
Appalachian Club - Da	aisy Town	
Appalachian Clubhouse (C) a/	Surveyed - 40SV120 Locus A	Avoid or evaluate potentially significant historic period deposits northeast and west of building, survey under building prior to disturbance, and monitor other ground-disturbing activities.
Sneed (1) b/ (C)	Surveyed - 40SV120 Locus A	Avoid or evaluate potentially significant prehistoric deposits prior to disturbance below A horizon, survey under building prior to disturbance, and monitor other ground-disturbing activities.
Smith (2) (C)	Partially surveyed - 40SV120 Locus A	Avoid or evaluate potentially significant historic period deposits behind (west of) building, survey under building prior to disturbance, and monitor other ground-disturbing activities.
Higdon (3) (C)	Surveyed - 40SV120 Locus A	Avoid or evaluate potentially significant prehistoric deposits prior to disturbance below A horizon, survey under building prior to disturbance, and monitor other ground-disturbing activities.
Swan (4) (NC)	Unsurveyed	Complete survey and survey under building prior to any disturbance; determine need for additional work or monitoring at that time.
Addicks (5) (C)	Surveyed - 40SV120 Locus A	Avoid or evaluate potentially significant prehistoric deposits prior to disturbance below A horizon, survey under building prior to disturbance, and monitor other ground-disturbing activities.
"Adamless Eden" (5A)(C)	Surveyed - 40SV120 Locus A	Avoid or evaluate potentially significant prehistoric deposits prior to disturbance below A horizon, survey under building prior to disturbance, and monitor other ground-disturbing activities.
Creekmore (6) (C)	Unsurveyed	Complete survey and survey under building prior to disturbance; determine need for additional work or monitoring at that time.
Mayo (7) (C)	Surveyed - 40SV120 Locus A	Avoid or evaluate potentially significant prehistoric deposits prior to disturbance below A horizon, survey under building prior to disturbance, and monitor other ground-disturbing activities.
Levi Trentham Log Cabin (7A) (C)	Surveyed - 40SV120 Locus A	Avoid or evaluate potentially significant prehistoric deposits prior to disturbance below A horizon, survey under building prior to disturbance, and monitor other ground-disturbing activities.
Mayo Servants' Quarters (7B) (C)	Surveyed - 40SV120 Locus A	Avoid or evaluate potentially significant prehistoric deposits prior to disturbance below A horizon, survey under building prior to disturbance, and monitor other ground-disturbing activities.
Cain (8) (C)	Unsurveyed	Complete survey and survey under building prior to disturbance; determine need for additional work or monitoring at that time.
Galyon (9) (C)	Surveyed - 40SV120 Locus A	Avoid or evaluate potentially significant prehistoric deposits prior to disturbance below A horizon, survey under building prior to disturbance, and monitor other ground-disturbing activities.
Galyon rear 1-room. (NC)	Surveyed - 40SV120 Locus A	Avoid or evaluate potentially significant prehistoric deposits prior to disturbance below A horizon, survey under building prior to disturbance, and monitor other ground-disturbing activities.
Baumann (10) (C)	Unsurveyed	Complete survey and survey under building prior to disturbance; determine need for additional work or monitoring at that time.

Table E-1: Recommendations Concerning Potential Impacts on Archeological Resources Because of Building Removal or Modification (continued)

Resource	Archeological Status	Recommendation
Appalachian Club - D	Daisy Town (continued)	
Scruggs-Brisco (11) (C)	Surveyed - 40SV120 Locus A	Avoid or evaluate potentially significant prehistoric deposits prior to disturbance below A horizon, survey under building prior to disturbance, and monitor other ground-disturbing activities.
Sneed (12) (NC)	Surveyed - 40SV120 Locus B	No additional work required.
Cook (13) (C)	Surveyed - 40SV120 Locus A	Avoid or evaluate potentially significant prehistoric deposits prior to disturbance below A horizon, survey under building prior to disturbance, and monitor other ground-disturbing activities.
Jamerson (14) (NC)	Surveyed - 40SV120 Locus B	No additional work required.
Hale (15) (C)	Surveyed - 40SV120 Locus A	Avoid or evaluate potentially significant prehistoric deposits prior to disturbance below A horizon, survey under building prior to disturbance, and monitor other ground-disturbing activities.
Burdette (16) (NC)	Surveyed - 40SV120 Locus B	No additional work required.
Bagley (17) (NC)	Surveyed - 40SV120 Locus B	No additional work required.
Appalachian Club - S	ociety Hill	
Gilliand (18) (C)	Unsurveyed	Complete survey and survey under building prior to disturbance; determine need for additional work or monitoring at that time.
Thomas (19) (C)	Unsurveyed	Complete survey and survey under building prior to disturbance; determine need for additional work or monitoring at that time.
F. Andrews (20) (NC)	Unsurveyed	Complete survey and survey under building prior to disturbance; determine need for additional work or monitoring at that time.
Andrews-Sherling (21) (C)	Unsurveyed	Complete survey and survey under building prior to disturbance; determine need for additional work or monitoring at that time.
Congleton- Brownlow (22) (C)	Unsurveyed	Complete survey and survey under building prior to disturbance; determine need for additional work or monitoring at that time.
McDonald (23) (C)	Unsurveyed	Complete survey and survey under building prior to disturbance; determine need for additional work or monitoring at that time.
W. Arnett (24) (NC)	Unsurveyed	Complete survey and survey under building prior to disturbance; determine need for additional work or monitoring at that time.

Table E-1: Recommendations Concerning Potential Impacts on Archeological Resources Because of Building Removal or Modification (continued)

Resource	Archeological Status	Recommendation
Appalachian Club - S	ociety Hill (continued)	
Franklin (25) (NC)	Unsurveyed	Complete survey and survey under building prior to disturbance; determine need for additional work or monitoring at that time.
Hutchins (26) (NC)	Unsurveyed	Complete survey and survey under building prior to disturbance; determine need for additional work or monitoring at that time.
Gaines (27) (NC)	Unsurveyed	Complete survey and survey under building prior to disturbance; determine need for additional work or monitoring at that time.
Spengler-Schmid (28) (NC)	Surveyed - 40SV120 Locus C	Survey under building prior to disturbance; monitor other ground-disturbing activities.
F. Arnett (29) (C)	Surveyed - 40SV120 Locus C	Survey under building prior to disturbance; monitor other ground-disturbing activities.
Wright (30) (C)	Surveyed - 40SV120 Locus C	Survey under building prior to disturbance; monitor other ground-disturbing activities.
Matthews (31) (C)	Surveyed - 40SV120 Locus C	Survey under building prior to disturbance; monitor other ground-disturbing activities.
"Little Cottage" (31A) (C)	Surveyed - 40SV120 Locus C	Survey under building prior to disturbance; monitor other ground-disturbing activities.
Allen (32) (C)	Surveyed - 40SV120 Locus C	Survey under building prior to disturbance; monitor other ground-disturbing activities.
Jeffords (33) (NC)	Surveyed - 40SV120 Locus C	Survey under building prior to disturbance; monitor other ground-disturbing activities.
McAmis (34) (C)	Surveyed - 40SV120 Locus C	Survey under building prior to disturbance; monitor other ground-disturbing activities.
Culver (35) (C)	Surveyed - 40SV120 Locus C	Survey under building prior to disturbance; monitor other ground-disturbing activities.
Knaffl (36) (C)	Surveyed - 40SV120 Locus C	Survey under building prior to disturbance; monitor other ground-disturbing activities.
Johnston (37) (NC)	Unsurveyed	Survey under building prior to disturbance; monitor other ground-disturbing activities.

Table E-1: Recommendations Concerning Potential Impacts on Archeological Resources Because of Building Removal or Modification (continued)

Resource	Archeological Status	Recommendation
Appalachian Club - S	ociety Hill (continued)	
Byers (or Chapman) (38) (C)	Surveyed - 40SV120 Locus C	Avoid or evaluate potentially significant feature north of building. Survey under building prior to disturbance, and monitor other ground-disturbing activities.
Dudley (39) (C)	Surveyed - 40SV120 Locus C	Survey under building prior to disturbance; monitor other ground-disturbing activities.
Kuhlman (40) (C)	Partially Surveyed - 40SV120 Locus D	Complete survey and survey under building prior to disturbance; determine need for additional work or monitoring at that time.
Kuhlman garage (40A) (C)	Partially Surveyed - 40SV120 Locus D	Complete survey prior to disturbance and determine need for additional work or monitoring.
Kuhlman woodshed (C)	Partially Surveyed - 40SV120 Locus D	Complete survey prior to disturbance and determine need for additional work or monitoring.
McNabb (41) (NC)	Unsurveyed	Complete survey and survey under building prior to any disturbance; determine need for additional work or monitoring at that time.
McNabb privy (NC)	Unsurveyed	Complete survey prior to disturbance and determine need for additional work or monitoring.
Appalachian Club - N	Aillionaire's Row	
Spence (42) (C)	Unsurveyed	Complete survey and survey under building prior to any disturbance; determine need for additional work or monitoring at that time.
Brandau (43) (C)	Surveyed - 40SV122 Locus B	Survey under building prior to disturbance; monitor other ground-disturbing activities.
Parrott (44) (NC)	Surveyed - 40SV122 Locus B	Survey under building prior to disturbance; monitor other ground-disturbing activities.
Murphy (45) (C)	Unsurveyed	Complete survey and survey under building prior to disturbance; determine need for additional work or monitoring at that time.
Murphy garage (45A) (NC)	Unsurveyed	Complete survey prior to disturbance and determine need for additional work or monitoring.
Murphy gazebo (NC)	Unsurveyed	Complete survey prior to disturbance; determine need for additional work or monitoring at that time.
Miller (46) (C)	Unsurveyed	Complete survey and survey under building prior to disturbance; determine need for additional work or monitoring at that time.

Table E-1: Recommendations Concerning Potential Impacts on Archeological Resources Because of Building Removal or Modification (continued)

Resource	Archeological Status	Recommendation
Appalachian Club - M	Millionaire's Row (continue	d)
Faust (47) (C)	Unsurveyed	Complete survey and survey under building prior to disturbance; determine need for additional work or monitoring at that time.
Faust garage (C)	Unsurveyed	Complete survey and survey under building prior to disturbance; determine need for additional work or monitoring at that time.
Young (48) (NC)	Unsurveyed	Complete survey and survey under building prior to disturbance; determine need for additional work or monitoring at that time.
Cambier (49) (C)	Unsurveyed	Complete survey and survey under building prior to disturbance; determine need for additional work or monitoring at that time.
Wonderland Club		
Wonderland Hotel (58) (C)	Surveyed – 40SV166 Locus A	Survey under building prior to disturbance; monitor other ground-disturbing activities.
Wonderland Annex (58) (C)	Surveyed - 40SV166 Locus A	Survey under building prior to disturbance; monitor other ground-disturbing activities.
Wonderland Servants' Quarters (Riordan) (58) (C)	Surveyed - 40SV166 Locus A	Survey under building prior to disturbance; monitor other ground-disturbing activities.
May or Moore (58-1A) (C)	Unsurveyed	Complete survey and survey under building prior to disturbance; determine need for additional work or monitoring at that time.
Paine (58-2B) (C)	Surveyed - 40SV123 Locus B	Avoid or evaluate potentially significant prehistoric deposits prior to disturbance below A horizon. Survey under building prior to disturbance, and monitor other ground-disturbing activities.
Preston (58-3C) (C)	Surveyed - 40SV166 Locus A	Survey under building prior to disturbance; monitor other ground-disturbing activities.
Bowman Brown (58-4D) (NC)	Unsurveyed	Complete survey and survey under building prior to any disturbance; determine need for additional work or monitoring at that time.
Hicks (58-5E) (C)	Unsurveyed	Complete survey and survey under building prior to any disturbance; determine need for additional work or monitoring at that time.
McMillian/Keith (58-6F) (NC)	Unsurveyed	Complete survey and survey under building prior to disturbance; determine need for additional work or monitoring at that time.

Table E-1: Recommendations Concerning Potential Impacts on Archeological Resources Because of Building Removal or Modification (continued)

Resource	Archeological Status	Recommendation	
Wonderland Club (co	Wonderland Club (continued)		
Vandergriff (58-7G) (NC)	Unsurveyed	Complete survey and survey under building prior to disturbance; determine need for additional work or monitoring at that time.	
Tate, Beaman & Tucker (58-8H) (C)	Unsurveyed	Complete survey and survey under building prior to disturbance; determine need for additional work or monitoring at that time.	
Richards or Brandau (58-9I) (NC)	Unsurveyed	Complete survey and survey under building prior to disturbance; determine need for additional work or monitoring at that time.	
Richards or Brandau woodshed (NC)	Unsurveyed	Complete survey and survey under building prior to disturbance; determine need for additional work or monitoring at that time.	
a/ (C) = Contribut	ring; (NC) = Noncontribution	ng. b/ (1) = Resource Number	

# Appendix **F**Consulting parties

# APPENDIX F: CONSULTING PARTIES FOR THE ELKMONT HISTORIC DISTRICT

#### **Tennessee Historical Commission**

State Historic Preservation Officer (SHPO) Clover Bottom Mansion 2941 Lebanon Road Nashville, Tennessee 37243-0442

#### **Advisory Council on Historic Preservation**

1100 Pennsylvania Avenue NW, Suite 809 The Old Post Office Building Washington D.C. 20004

#### **Eastern Band of Cherokee Indians**

Qualla Boundary Tribal Historic Preservation Officer (THPO) Post Office Box 455 Cherokee, North Carolina 28719

#### The Chickasaw Nation

Tribal Historic Preservation Officer (THPO) Post Office 1548 Ada, Oklahoma 74821-1548

#### **Elkmont Preservation Committee**

II828 Couch Mill Road Knoxville, Tennessee 37932

#### **National Parks Conservation Association**

706 Walnut Street, Suite 200 Knoxville, Tennessee 37902

#### **National Trust for Historic Preservation**

456 King Street Charleston, South Carolina 29403

#### Sierra Club

1401 Peachtree Street NE, Suite 345 Atlanta, Georgia 30309

#### **Smoky Mountains Hiking Club**

Post Office 1454 Knoxville, Tennessee 37901

# Appendix **G**

Conditions of Buildings within the Elkmont Historic District

# APPENDIX G: 2003 CONDITION OF BUILDINGS WITHIN THE ELKMONT HISTORIC DISTRICT

Table G-1 details the 2003 condition of the buildings found in the Elkmont Historic District. The table includes all of the buildings in the Appalachian Club and the Wonderland Club districts. The initial structural assessment, undertaken as part of National Environmental Policy Act and Section 106 compliance processes, was conducted in 2002 (Cleveland et al. 2002) and updated in the fall of 2003 (Cleveland et al. 2003). An overview of this information was presented to the public at meetings held in March 2004, and to the consulting parties in April 2004.

The condition of the buildings is described by area. The terms "good," "fair," and "poor" as defined in the 2003 reassessment of buildings (Cleveland *et al.* 2003) are relative assessments of the buildings' physical condition, and were defined by Cleveland *et al.* as follows:

"Good" indicates that a building component or system needs no more than cleaning or a minimal amount of repair or replacement of existing components. Those buildings rated in good condition need items such as roof repair; replacement of lattice skirting around the crawl space; repair of stone walls under porches; and removal of debris from the interior.

"Fair" indicates that a building or component can be brought back to good condition with a moderate amount of repair or replacement of the existing components. Those in fair condition require more extensive work as compared to those in good condition, including repair of water damage requiring either roof replacement or considerable repairs; repair of water damage to ceiling and floors; repair or replacement of porches; replacement of some foundation posts or other foundation repair; repair of siding boards; and replacement of missing window sashes.

"Poor" indicates that a building component or system requires extensive repair or replacement. Those in poor condition have most of the same types of problems as those in fair condition, but the problems are more extensive. For example, a floor system in poor condition might require framing replacement, considerable structural reinforcement might be necessary to correct excessive sagging, or the flooring and framing might be substantially damaged and require total replacement in one or more rooms.

Table G-1: 2003 Condition of Buildings within the Elkmont Historic District

Building*	2003 Condition	Comments
Appalachian Clul		
Appalachian Clubhouse (C) <sup>a/</sup>	Good	Built about 1934. Roof and flashing between roof and chimney needs repair; minor water damage from roof leaks; settling of the floor; rot or deterioration of lattice skirting around crawlspace, foundation posts, wallboards, main staircase, porch floor, railings and support posts, window washes, window screens, and siding.
Sneed (1) a/ (C)	Good	Built about 1910. This log building was stabilized in 1999 and again in 2004. As of 2003, the building was in good condition.
Smith (2) (C)	Fair	Built about 1910. The 2003 reassessment found the exterior remaining in fair condition.
Higdon (3) (C)	Poor	Built about 1910. The 2003 reassessment revealed damage evident at the south side roof valley where the rear wing and main section meet. The rear chimney bricks are failing and the rear wing is leaning and rotting in places.
Swan (4) (NC)	Fair to Poor	Built about 1910. Front porch flooring rotted; water damage at ceiling; main room floor sloped; north central room has water damaged ceiling; rear hallway floor slopes; kitchen ceiling failing because of water penetration; enclosed rear porch has a major roof leak; addition has water penetration through hole in roof, causing some of ceiling to collapse and most of floor to collapse; wood steps on north side are gone; landing floorboards soft; north end roof valley has lost metal and asphalt covering; some rear siding is split and/or rotted.
Addicks (5) (C)	Fair to poor	Built about 1910, a "set off" house. The 2003 reassessment revealed that the front porch was in fair to poor condition and was stabilized in 2004.
"Adamless Eden" (5A) (C)	Fair to poor	A playhouse built about 1921 of unhewn logs. The 2003 reassessment found conditions somewhat fair to poor and the playhouse was repaired and stabilized in 2004.
Creekmore (6) (C)	Fair to poor	Built about 1910. The condition was fair to poor and by 2004, the rear, modern deck had failed.
Mayo (7) (C)	Good	Built about 1910, a "set off" house. The 2003 reassessment indicated that the building was still in good condition.
Levi Trentham Log (7A) (C)	Good	Built about 1830 and moved to the lot in 1932. This building was in good condition in 2002 and the overall appearance in 2003 was similar.
Mayo Servants' Qtrs. (7B) (C)	Good to fair	Built about 1920. The 2003 reassessment indicated that the building was in good to fair condition. This building was cleaned and stabilized in 2004.
Cain (8) (C)	Fair	Built about 1915. The 2003 reassessment indicated that the building was in fair condition.
Galyon (9) (C)	Poor	Built about 1910; one room addition is noncontributing and is no longer connected to the main building. The 2003 reassessment revealed exterior conditions had worsened. Some front porch foundation posts are rotted; middle addition on north side sags because of a fallen foundation post; eave damage at the rear additions on north side; gutter has fallen off rear addition on the south side; rear siding shows moisture damage; rear sill of main block is rotted in places; and bottom edge of siding is rotted on the south side and southwest corner.
Galyon rear 1- room (NC)	Good to fair	Exterior at entry has rotted area and missing fabric. The siding displays rot and water damage.

 $Table \ G-1: 2003 \ Condition \ of \ Buildings \ within \ the \ Elkmont \ Historic \ District \ (continued)$ 

Building*	2003 Condition	Comments
Appalachian Club	– Daisy Town	(continued)
Baumann (10) (C)	Fair	Built about 1910; some front porch foundation posts are rotted; middle addition on north side sags due to a fallen foundation post; eave damage on rear addition (north side); gutter has fallen off rear addition (south side); rear siding shows moisture damage; rear sill of the main block is rotted in places; and bottom edge of siding is rotted at south side and southwest corner.
Scruggs-Brisco (11) (C)	Poor	Built about 1915, fair to poor condition at rear. The 2003 reassessment revealed stones missing from the front porch foundation; rising dampness visible on south side; deterioration of the roof on the south side entry porch; sagging of the southeast corner of cabin; rotting of the siding at the southeast corner; and the north side entry steps are rotted/missing.
Sneed (12) (NC)	Poor	Rebuilt in 1974 after a fire destroyed the original building. Building sinking at middle; water damage in downstairs bathroom; possible bat infestation noted in several places on second floor; exterior plywood siding is warped at bottom on north side; rear porch steps and rails are rotted/missing; and dry rot evidence exists at rear porch sill.
Cook (13) (C)	Fair to poor	Built about 1912; the 2003 assessment revealed that the exterior has problems: the front porch displays rot in floorboards and at the railing; the siding is rotted on the south side, especially in the area of the meter box; portions of the foundation lattice are rotted on the north side; some perimeter foundation posts are rotted; and foundation piers of the rear additions are leaning.
Jamerson (14) (NC)	Good	Rebuilt in 1974 after a fire destroyed the original building. Exterior rear deck sags; piece of rear deck railing is broken; and concrete block pier supporting northwest corner addition is leaning.
Hale (15) (C)	Poor	Built about 1914; the 2003 reassessment revealed problems with the exterior: a rusted gutter at the entry steps; the front porch sags; boards covering the foundation at the southeast corner and east side are rotted; the roof is damaged at the rear high section, possibly from limbs falling off a dead tree; the roof is damaged at the northeast corner of the room; the roof, eaves, and siding are damaged in the middle of the north side of the building.
Burdette (16) (NC)	Fair	Rebuilt in 1974 after a fire destroyed the original building. Building has water damage throughout. The exterior has mildew and mold on creek side; water damage at south side; gutter above southeast corner shed rusted and roof of shed caved in; north side steps rotted and fallen; and west side windows are broken.
Bagley (17) (NC)	Fair	Rebuilt in 1974 after a fire destroyed the original building. Building displays moisture damage and mold; and uneven/buckled linoleum floor. The exterior has broken windows on south side; rising damp at sump room addition; and broken sliding glass doors at rear.
Appalachian Club	- Society Hill	
Gilliand (18) (C)	Fair to poor	Built about 1916. The 2003 reassessment revealed exterior issues: rotting siding on the east side of the south side addition; rotting of the second-story window hood on the south side of the main block; a rusted gutter at the entry; a sag in the front room of the first story; and the rear steps are soft and rotting.
Thomas (19) (C)	Poor	Built about 1910. Structural defects noted in 2003 include front porch floor sags and is rotted in places; foundation lattice on east side is rotted; north end porch room sags and leans; foundation lattice bows at the north side; mid-rear room on north side leans to east; mildew on support timbers near the creek; sill and siding at southwest corner of rear wing are damaged; rear foundation lattice is broken; south chimney is cracked and adjacent floor sags.

 $Table\ G-1: 2003\ Condition\ of\ Buildings\ within\ the\ Elkmont\ Historic\ District\ (continued)$ 

Building*	2003 Condition	Comments
Appalachian Club	– Society Hills	s (continued)
F. Andrews (20) (NC)	Fair	Built about 1910. Southeast room (addition) floor slopes to south; southwest kitchen has water damage at ceiling, floor, and walls; the west center room has water stains at ceiling, and floors that slope south; the northeast room has uneven floor and the stone chimney leans to west; northwest room floor slopes to east; basement bathroom has mold and mildew; and basement southwest area wood floor rotted at entry. Exterior has rotted sill at entry to hot water heater room on south side, rotted siding at rear basement room, soft eaves at first-story rear, mildew at front timbers, and needs extensive porch repairs.
Andrews- Sherling (21) (C)	Poor	Built about 1912. Structural defects and exterior condition issues noted in 2003 included recent graffiti inscribed in the concrete next to the west chimney; rotted sill at the entry to the hot water heater room on the south side; rotted siding on the rear basement room; eaves at the rear of the first-story are soft; and there is mildew on the front support timbers.
Congleton- Brownlow (22) (C)	Poor	Built about 1915. The 2003 reassessment found exterior issues: rotted fascia at south side; moss growing on the roof; rotted front porch roof and damaged siding at each end of porch; porch roof truss sags; fascia is missing at the north side; siding is rotted at the northwest corner; and the overhanging eave at the rear screened porch has rotted and is collapsing.
McDonald (23) (C)	Poor	Built about 1910. In 2003, structural issues with the following exterior conditions were noted: the roof of the second-story room sags; the steps to the second-story room are rotted and missing; the bottom edge of the siding is rotted on the south and east sides; and the crawl space door on the north side is rotted.
W. Arnett (24) (NC)	Fair	Build about 1912. East inset porch has floor rotted and water-damaged ceiling; main room has buckling floorboards, water damage at chimney; windows broken in front bow window; hallway to rear floor buckled and slopes to north; north center room floor buckled; bathroom floor uneven; northwest room floor slopes to rear and has mildew; rear screened porch floor slopes and has hole in floor at door to rear deck; south room fireplace leans and is crumbling; water damage at chimney and adjacent wall surfaces; floor and walls slope away from chimney on each side and floor is buckled; rear bathroom floor slopes toward creek; and rear pantry and kitchen have extensive water damage at ceiling, walls, and floor, and floor slopes toward creek. Exterior stone foundation wall at rear has numerous cracks and is missing stones; bottom of siding rotted at west and north sides; rotted steps and landing at rear; eave damage at northwest and northeast corners; and some perimeter foundation posts rotted at north side.
Franklin (25) (NC)	Fair	Build about 1913. Front porch north section has rotted railing, east section has rotted railing and floor is rotted near railing, and there is ceiling and floor damage at entry; rear porch room has water damage to the ceiling, walls, and floor in southeast corner; and the front fireplace room has water stains at chimney. Floors slope in the main, rear porch, southwest, and fireplace room. The exterior basement-level landing on north side is soft, bottom edge of siding at northwest corner room is deteriorated, rear deck is soft, moss on roof, roof deteriorated at chimney, and siding in front gable is rotted.
Hutchins (26) (NC)	Fair	Build about 1912. The front porch has some rotted rafter ends, water stains at ceiling, and rotted siding at north end; main room ceiling and beams sagging, and water stains at ceiling; rear dining room floor slopes to rear; northwest room floor uneven; northeast room floor uneven and hole in ceiling, water damage to ceiling, floor, and east wall; and the basement storage room has a collapsed wood floor. The exterior has soft rear steps; moss, mildew, and rising damp evident on rear siding; and the chimney has vertical cracks and is leaning away from building.

Table G-1: 2003 Condition of Buildings within the Elkmont Historic District (continued)

Building*	2003 Condition	Comments
Appalachian Club	– Society Hills	s (continued)
Gaines (27) (NC)	Fair to poor	Build about 1912. Front porch floor rotted at front edge; main room has hole in ceiling at chimney, uneven floor, and water stains at ceiling; southeast bathroom/washroom floor slopes to front, and there is mildew and water staining at ceiling and walls; south-southeast room floor uneven; south-southwest room and bedroom have uneven floor and some water damage at ceiling and floor; rear porch south section floor has rot and slopes toward cabin, and the north section floor has rot, large holes, and slopes toward cabin; northwest room floor sloped and has water stains; northeast room floor slopes to the middle; and northwest corner porch at basement level floor rotted and sloped toward cabin, with rear wall pulling away from ceiling. The exterior chimney is missing stones at rounded cap; rear north wall bows out; rear porch sill rotted; rear porch posts rotted at bottoms; some rear siding rotted; and there is termite damage.
Spengler- Schmid (28) (NC)	Fair	Build about 1912. Front porch south end displays rot; main room floor slopes to rear with moisture damage; leak at chimney and adjacent wall damage; adjacent bathroom floor sloped; northwest room floor sloped; interior room has uneven floor; rear screened porch slopes toward creek at south end; kitchen has water damage at ceiling; storage room roof, ceiling, and floor damaged by water infiltration; the addition has water damage to ceiling and walls and the adjacent bathroom is badly water-damaged. The exterior has rot and damage at south side of addition, window sills on addition rotted, chimney has lost mortar, gutter rusted at front porch entry, cracks and holes in front porch foundation, damaged foundation lattice at north and west sides, and eave damage at southwest corner and west side.
F. Arnett (29) (C)	Poor	Built about 1910. The 2003 reassessment revealed issues with the exterior: rotted logs at southwest corner, gutter rusted through; warped wooden shakes at the southwest and northwest corners; leaking gutter at the northwest corner has caused deterioration of siding, window frame, and sheathing; warped shingles in the main gables; a roof gap at the chimney and damage to the eave and siding; and the log ends on the bathroom addition are rotted.
Wright (30) (C)	Poor	Built about 1921. The 2003 reassessment noted these issues with the exterior: eave damage at the ridge on the north side; gap in the roofing at the chimney (north side); water-damaged siding on the north side; damaged rear porch; fascia damage at the rear of the main block; and the shed on the rear of the cabin sags.
Matthews (31) (C)	Poor	Built about 1910 as a log building. The reassessment in 2003 revealed the following problems: front porch rails have rotted, two south end posts are rotted at the bases, and two floorboards have buckled in the side screened porch; south main room wood floor slopes away from the chimney on each side, the chimney leans toward the rear; kitchen floor slopes to rear and there is water damage at ceiling along north side and in northwest corner; north room has some water damage at ceiling; and the south room has some water damage at ceiling. The exterior has holes in front porch stone foundation wall, roof gap at chimney, cracks in stone foundation at southwest and northwest corners and along west side, rear walled space has rotted siding and stone doorway / flat arch that is about to fail, and rotted foundation lattice at north side.
"Little Cottage" (31A) (C)	Fair	Built about 1925. The 2003 reassessment revealed some rot in handrails on the front entry stoop/porch and the steps are soft; the main room floor slopes in the southeast corner and has a small hole; the rear screened porch floor slopes to the east; and the wood screen door has fallen on floor.
Allen (32) (C)	Poor	Built about 1910. In 2003, exterior was found to have eave and gutter damage west of the chimney on the north side; rotted and missing boards at the basement storage room on the north side; gutter is off at the south side porch; and the south side porch leans.

Table G-1: 2003 Condition of Buildings within the Elkmont Historic District (continued)

Building*	2003 Condition	Comments
Appalachian Clul	b – Society Hill	s (continued)
Jeffords (33) (NC)	Fair	Build about 1920. Main room floor slopes away from chimney and slopes to south-southeast overall; adjacent north end space floor slopes to north and to stove platform at center; northwest room floor rotted, wallboard walls and ceiling heavily water-damaged; kitchen floor, bedroom off kitchen, bathroom, and southeast room floor slope; water-damage to ceiling; exterior has rot at bottom edge of siding on east side, roof sags at ridge, north side shed addition sags at sill, siding at north side of rear addition is split, siding of southwest corner room displays rot, foundation posts of southwest corner room rotted and leaning, south side siding is split and rotted, and sill on south side sags.
McAmis (34) (C)	Fair to poor	Built about 1920. The 2003 reassessment noted exterior issues: rotted fascia above the porch roof; rising dampness evident on the front siding; north side eave is rotted on both sides of the chimney; rotted support posts, eaves, and siding at the basement room.
Culver (35) (C)	Fair to poor	Built about 1922. The 2003 reassessment noted that exterior problems: rot at the bottom edge of the front siding; missing and rotted siding at the north side; and eave damage at the rear; rear siding is rotted and missing where the deck and steps have collapsed.
Knaffl (36) (C)	Failed 2005	Built about 1922. In 2003, the exterior issues included the metal roofing is off or coming off; stones at top of chimney are missing; the ridge/eaves are split at south side; siding is coming off at the southeast corner; the bottom edge of the siding is rotted along the rear side; the basement wall is bowing in on the north side; and the wood shingles on the front and northeast corner are warped.
Johnston (37) (NC)	Fair	Build about 1920. Main room floor slopes off center to each side, with hole in ceiling at chimney; screened porch and deck have hole in roof/ceiling near wood screen door to outside and at southeast corner; hall to north bedroom floor slopes to north; and north bedroom floor sloped and uneven and there are water stains at ceiling. The exterior bottom edges of siding shows rot; screened porch sags, and sill rotted on east side of chimney.
Byers (or Chapman) (38) (C)	Poor	Built about 1912. The 2003 condition assessment noted exterior issues: the siding is cracked in several places; several foundation slats are missing; the sill at north side of the sleeping porch is rotted; fascia is rotted at the northeast corner; and there is water damage and support posts are missing at the southwest corner. This building was stabilized in 2004.
Dudley (39) (C)	Fair to poor	Built about 1923. The reassessment in 2003 revealed that the chimney is in need of repair, with problems with exterior: the front gutter and fascia is pulling away from the porch roof; several porch foundation slats are rotted; there is mildew/mold at the rear north side, west side, and rear south side; and the wood steps to the rear deck are rotted.
Kuhlman (40) (C)	Fair	Built about 1925. The reassessment in 2003 noted exterior problems: the gutter is rusted and eave is rotted at the northeast corner, at the north side of front porch, and at the front porch entry (south side); the entry porch stair rail is soft; the fascia board is rotted at the rear of the south side; and the gutter is partially rusted at the east side.
Kuhlman garage (40A) (C)	Good to fair	Built about 1926. The 2003 assessment revealed that the gutters were the primary problem on the exterior.
Kuhlman woodshed (C)	Fair to poor	Built about 1926. The 2003 assessment indicated that the asphalt roofing had deteriorated and was missing and there is a sag in the roof.

 $Table \ G-1:\ 2003\ Condition\ of\ Buildings\ within\ the\ Elkmont\ Historic\ District\ (continued)$ 

Building*	2003 Condition	Comments
Appalachian Club	– Society Hills	s (continued)
McNabb (41) (NC)	Fair	Build about 1923. Main room floor slopes away from chimney on each side and section of has ceiling fallen; kitchen floor slopes to east; bathroom floor slopes to east; south middle room floor slopes slightly to south; and southwest room has water damage at south wall and ceiling below skylights. The exterior siding is missing at northeast corner, rusted gutter at south side, and eave damage and rot at southeast corner.
McNabb privy (NC)	Fair	Build about 1923. In 2003, the bottom edge of the privy siding was rotted where it touches the ground.
Appalachian Club	- Millionaire's	s Row
Spence (42) (C)	Fair	Built about 1928. The 2003 reassessment found exterior problems: west end wing (south side) has cracked and loose foundation stones; crawlspace opening leans to the east, and sill has a noticeable sag; west gable end is damaged at the ridge (possibly from fallen tree); log over the main entry has rot; rear patio has stones missing and displaced; wood steps at the small rear screened stoop/porch lean away from cabin; siding, lattice, and door of the basement rooms have extensive rot.
Brandau (43) (C)	Fair to poor	Built about 1928. The 2003 reassessment revealed structural damage and exterior issues: one front window hood is rotted; the other front window hood is rotted and has fallen; siding at the east side of the chimney is rotted; the roof damage at the southeast corner; moss is growing on the roof; and the roof framing is damaged at the northwest corner of the rear porch.
Parrott (44) (NC)	Poor	Built about 1928. Southeast corner porch/stoop has soft floorboards and support post is rotted at bottom; main room roof leaks have damaged flooring; chimney leans to east and is sinking; loft floor slopes off center, and there is damage to the roof and floor at west wall; east room addition has damaged ceiling at east wall and northeast corner (flooring rotted, too); west room has leaking ceiling and resulting floor damage at southeast corner; west room bathroom has holes and partially collapsed with rotted areas in ceiling and floor; small room off kitchen floor slopes to north; kitchen rear space floor slopes off center on both sides; exterior roof is sagging and roofing rotted at front corner porch and room addition, rot and mildew at north side of room addition, extensive rot and damage at west bathroom addition, roof and eave damage at southwest corner, and window east of chimney slanted.
Murphy (45) (C)	Fair to poor	Built about 1928. In 2003, structural damage and exterior issues included: clerestory is sagging near the chimney; a recent roof patch sags at the eaves; the wall below the roof patch is rotted; the foundation and wall bow out at the northeast corner; the siding is rotted at the northeast entry; the northeast window hood shows rot and is pulling away from wall; some eave damage is apparent at the north side; northwest corner has some water damage; the west wall bows out; and there is mildew on south side.
Murphy garage (45A) (NC)	Failed	The 2003 reassessment noted that the front garage roof has collapsed and the vertical board siding is removed in several places. The rear garage room (likely servant's room) has floor and ceiling water damage.
Murphy gazebo (NC)	Fair	The Murphy gazebo is a noncontributing outbuilding since it was rebuilt from the original design or has loss of structural integrity.

Table G-1: 2003 Condition of Buildings within the Elkmont Historic District (continued)

Building*	2003 Condition	Comments
Appalachian Club	- Millionaire's	s Row (continued)
Miller (46) (C)	Fair to poor	Built about 1928, was originally built as a cantilever barn and remodeled in 1950 as a cabin. In 2003, structural damage and exterior concerns included mildewed siding and some missing siding at the west end; balcony front gates are not attached; south side cantilevered second floor sags; south side foundation blocks are washed out at ground; some siding is warped on south side second floor; roof cupola has deteriorated; some roof sag is apparent at the ridge; ground-level south end railing is warped and east end support post is slanted; main fascia of the east end is infested with carpenter bees; second floor porch sags at northeast corner; second floor siding at the north side has rot and water damage; several stones have fallen out of the stone walls.
Faust (47) (C)	Fair to poor	Built about 1928. The 2003 reassessment noted structural damage with the following exterior conditions: fallen stones at the yard wall; rotted sill, siding, and framing at the rear screened porch entry (east side); rot at the rear screened porch sill on the south side; rotted siding on the rear room / bathroom on the east side; damaged eaves at the rear room / bathroom and at the west side of the main roof; rotted and missing siding and missing foundation stones on the west side of the main block; rotted eave on the north side where the main roof joins the east porch roof; and rotted and split siding at the base of the north side.
Faust garage (C)	Poor	Built about 1928. The 2003 assessment found that the garage is not salvageable in its current condition and would require reconstruction if it was proposed to be retained in an alternative.
Young (48) (NC)	Poor	Built about 1930. The front deck has soft floorboards, water-damaged railing, and rot at wood screen door and threshold leading to screened porch; screened porch floor is rotted near entry screen door; main room floor slopes to northwest; rear wing den floor sinks off joists, floor is low near rear chimney, and there is mildew at ceiling; rear wing kitchen floor slopes to north; and the bedroom addition floor slopes to rear and has mildew and water stains at ceiling. The exterior stone steps at deck are cracked, stone foundation at west wall of main block is bowing out, roof and wall are rotted at hyphen, gutter is off and roofing is coming up at screened porch; rear part of screened porch on east side slopes and siding is water-damaged at east side of rear wing.
Cambier (49) (C)	Fair to poor	Built about 1940, is the last cabin constructed at Elkmont. The 2003 reassessment noted exterior issues: the gutter, which is off at the front, requires repairs and the fascia boards are rotted as a result of water damage originating from the detached gutter; the west wall bows slightly; the rear steps and landing are rotted; and there is rising dampness on the east porch/room.
Wonderland Club	)	
Wonderland Hotel (C)	Failed; removed in 2006	Front section built in 1912, east side extension added at unknown date, rear wing constructed about 1928. The 2003 assessment noted the following problems: both ends of front porch had collapsed, the dormer over the front entrance had collapsed, extensive damage had occurred where the two sections of the "L" shaped building met; post bases of many of the footings were rotting; many sections of the sill beams needed replacement; the main stair had extensive damage; the roof and many elements of the floor structure were sagging; the roof had deteriorated and the gutters needed to be replaced; and gypsum and composition wallboard needed to be replaced. The hotel collapsed in August 2005 and the debris was removed in 2006.
Wonderland Hotel Annex (C)	Fair to good	Built about 1920. The following problems were noted during the 2003 assessment: spot deterioration that allowed water to penetrate the building, water damage at the two rear inside corners and to the social room fireplace where the roof flashing at the chimney failed; the open porch collapsed.

Table G-1: 2003 Condition of Buildings within the Elkmont Historic District (continued)

Building*	2003 Condition	Comments		
Wonderland Club	(continued)			
Wonderland Servants' Quarters (Riordan) (58) (C)	Poor	Built about 1930. The 2003 reassessment revealed rising exterior dampness; west entry and portico on south side are leaning east; crack in concrete walk/stoop at the east entryway on the south side; insect damage to some foundation posts; a portion of the cabin south of the chimney is leaning south/southeast; the eaves are soft at several locations; and the siding at the west side entry portico has sustained water damage.		
May or Moore (58-1A) (C)	Poor	Built about 1917. Structural problems and exterior issues included a missing section of eave at the front of the main roof; the east end of the front façade bows outward; a section of the eave at the west side of the chimney is rotted; a hole has developed in the siding at the chimney; and the steps and deck to the northeast corner entryway are rotted.		
Paine (58-2B) (C)	Poor	uilt about 1928. Structural problems and exterior issues included siding is rotted at the bottom edge; a falling tree apparently ripped the utter off the north side of the addition; the gutter at the south side of the addition has fallen off; the siding in the east gable of the lain block shows rot and mildew; the west side of the main block is mildewed; and the wooden steps and landing at the rear screened brich are rotted and have collapsed.		
Preston (58-3C) (C)	Fair	Built about 1922. The 2003 reassessment revealed exterior problems: the shingles at ground level are rotted and mildewed; the higher shingles are warped and brittle, with some missing; the roof is covered with plant debris and growing vegetation.		
Bowman or Brown (58-4D) (NC)	Poor	Built about 1913. Multiple holes in roof resulting in damage to ceiling walls and floor in dining room, southeast room off dining room, kitchen, hallway off kitchen, east and west bathrooms, interior chimney room, and vestibule. Enclosed dogtrot/hallway to rear screened porch has holes in wallboard, with ceiling and the wood floor sloped; interior room (contains rear side of later stone chimney) wallboard ceiling falling and wood floor rotted at south side; west end den wallboard ceiling falling, rotted wood flooring and water damage all around, especially at edges; rear screened porch has two holes in roof/ceiling at east half; and one hole in roof/ ceiling at west end of west half, resulting in rotted siding and flooring; sink room at bottom of stairs has water damage; rear corner porch has rotted wood railing; north side bedroom wood floor slopes to west and is rotted in places, with some water damage at wallboard ceiling and moldy sheet paneling at walls; and the west end bedroom has water-damaged wallboard ceiling and wood floor and moldy sheet paneling at walls. Exterior shingles and plywood are saturated with water; some shingles warped and brittle; large tree limb on roof; roof sags at ridge, toward chimney, and to rear; soft eaves, collapsed roof at front entry stoop; stoop materials rotted and soft; rear porch roof partially gone at west end; middle rear porch roof collapsed; vertical boards at foundation rotted; and perimeter foundation posts rotted, split, or leaning.		
Hicks (58-5E) (C)	Fair	Built about 1918. The 2003 reassessment found the following exterior problems: eave damage on the east shed addition; some siding rot at ground level; and the front screened porch crawlspace door has fallen off its hinges.		

Table G-1: 2003 Condition of Buildings within the Elkmont Historic District (continued)

Building*	2003 Condition	Comments		
Wonderland Club	(continued)			
McMillan/Keith (58-6F) (NC)	Poor	Built about 1922. The 2003 reassessment revealed that the front screened porch has several holes and rotted places in deck and holes in roof/ceiling; main room has uneven floor, water stains at ceiling, and ceiling is falling in places; southeast room floor is rotted and uneven, ceiling is caving in and closet is damaged; kitchen roof/ceiling is collapsed; 2-panel door with one light to collapsed rear porch; southwest room floor is soft and slopes to north and ceiling is down in southeast corner; northwest room floor slopes to west; tree damage to roof on east side; rear porch roof and walls are collapsed; former landing at rear of east side is rotted away, T1-11 siding on east side is rotted in places; soft eave on west side; and southwest corner of cabin coming off concrete block supports.		
Vandergriff (58-7G) (NC)	Poor	Built about 1925. Structural problems include east side porch roof sagging; water damage on roof; concrete and stone deck cracked; south end of wood deck rotted; main room floor and wall lean east at chimney; north end addition leans west; ceiling is water-stained near chimney; and rear bedroom floor slopes off center on both sides. Exterior siding panels mildewed; tree lying on main roof; southwest corner ramp and landing leaning slightly; and south end window and frame bowing out and wall warped.		
Tate, Beaman & Tucker (58-8H) (C)	Fair to poor	Built about 1926. Structural problems and exterior issues included stone retaining wall at the road is cracking and spalling; foundation siding is rotted at northeast corner; gutter is down on east side near front; siding is rotted at ground on east and west sides near rear; holes in the roof/eave at northwest and southwest corners; and vertical boards at south side of the foundation are missing or rotted.		
Richards or Brandau (58-9I) (NC)	Poor	Built about 1920. Structural problems revealed by the 2003 reassessment included east side porch slopes to south/southeast and the floorboards are rotted; kitchen floor slopes to southwest and there is water-damaged ceiling and floor at southeast corner; rear screened porch has water damage at southwest corner; floor at east end slopes north; hole in roof/ceiling and falling wallboard; west closet and bathroom addition pulling away from cabin; main room chimney leans to north; hole in roof/ceiling at north end and hole in floor below; northeast bedroom leans to south/southeast; water-damage to ceiling; east middle bedroom leans to south and floor slopes off center on both sides; east room in basement has missing or rotted floorboards and some support posts leaning; west room of basement has fallen portions of wallboard ceiling; exterior roof near south end was crushed by large tree limb; siding rotted at ground on east side near rear; tree lying on concrete deck of north end porch, and northwest eave, corner of roof, and upper siding knocked off by tree; gutters off and eaves soft at west side, roof and eave damage and rotted siding at southwest corner.		
Richards or Brandau woodshed (NC)	Poor	Built about 1940. In 2003, the reassessment revealed that the roof had failed and the siding was missing or lying on the ground at the south side of the building.		

(C) = Contributing; (NC) = Noncontributing; (1) = Resource Number

Bibliography, Preparers and Consultants, Acronyms and Abbreviations, Glossary and Index



#### **BIBLIOGRAPHY**

- Advisory Council on Historic Preservation (ACHP)
  - 1999a The new 36 CFR 800: highlights of changes. A briefing session by the Advisory Council on Historic Preservation. Washington D.C.
  - 1999b The revised Section 106 regulations: major changes, effective June 17, 1999. Washington D.C.
  - 1999c CFR 800 Protection of Historic Properties; Recommended approach for consultation on recovery of significant information from archaeological sites; Final rule and notice. Washington D.C.
  - 1999d The revised Section 106 regulations: flow chart and flow chart explanatory material," Washington D.C.
  - 1999e The revised Section 106 regulations: full text. Washington D.C.
- American Park Network Media (APN).
  - 2001 Great Smoky Mountains History web page. Available online at: <a href="http://www.americanparknetwork.com/parkinfo/content.asp?catid=85&contenttypeid=32">http://www.americanparknetwork.com/parkinfo/content.asp?catid=85&contenttypeid=32</a>
  - 2004 Great Smoky Mountains At a Glance web page. Available online at: http://www.americanparknetwork.com/parkinfo/content.asp?catid=68&contenttypeid=32

#### Area Connect

2000 Information extracted from "Gatlinburg Population and Demographics." Available on the Internet at <a href="http://gatlinburg.areaconnect.com/statistics.htm">http://gatlinburg.areaconnect.com/statistics.htm</a>.

## Baldeagleinfo.com

2003 American Bald Eagle Information web site. Available on the Internet at <a href="http://www.baldeagleinfo.com/">http://www.baldeagleinfo.com/</a>>.

## Bass, Q. R., III.

1975 Prehistoric Settlement and Subsistence Patterns in the Great Smoky Mountains. Knoxville, TN: Master's thesis, Department of Anthropology, University of Tennessee.

## Birds of Oklahoma.

2004 Loggerhead shrike, *Lanius ludovicianus* web page. Available online at: <a href="http://birdsofoklahoma.net/Loggerheadshrike.htm">http://birdsofoklahoma.net/Loggerheadshrike.htm</a>

#### Bolishifski, J.B. and E.R. Hartford.

1975 Industrial Noise and Hearing Conversation. National Safety Council. Chicago, Illinois. 1,120 pp.

#### Birdsong V.

1997 "Trip Report: Elkmont Campground Maintenance Shed." Gatlinburg, TN: unpublished report on file at Great Smoky Mountains National Park.

#### Branham, M.

"Firefly Facts." *The Firefly Files.* Available on the Internet at < <a href="http://iris.biosci.ohio-state.edu/projects/FFiles/frfact.html">http://iris.biosci.ohio-state.edu/projects/FFiles/frfact.html</a>.

#### Brown, L

1993 "Comments on *The History and Architecture of the Elkmont Community*." Letter to Phil Thomason, 10 February 1993. Gatlinburg, TN: on file at Great Smoky Mountains National Park.

#### Brown, M. L.

2000 The Wild East: A Biography of the Great Smoky Mountains. Gainesville, FL: University of Florida Press.

## Burns, R.M. and B.H. Honkala, technical coordinators

1990 Silvics of North America, Volume 1: Conifers. Washington, D.C.: Agriculture Handbook 654.

U.S. Department of Agriculture, Forest Service. Eastern Hemlock chapter is available on the Internet at

<a href="http://www.na.fs.fed.us/spfo/pubs/silvics">http://www.na.fs.fed.us/spfo/pubs/silvics</a> manual/Volume 1/tsuga/canadensis.htm>.

## California Wetlands Information System (CWIS)

2002 National Historic Preservation Act. Web page available online at: http://ceres.ca.gov/wetlands/permitting/NHPA\_summary.html

## Center for Remote Sensing and Mapping Science and NatureServe

2003 Draft Report: Vegetation Classification System for Mapping Great Smoky Mountains National Park. Athens, GA: Center for Remote Sensing and Mapping Science, Department of Geography, The University of Georgia, and Durham, NC: NatureServe, Durham Office.

#### Center of Research in Water Resources

1995 A Review and Evaluation of Literature Pertaining to the Quantity and Control of Pollution from Highway Runoff and Construction. 2nd edition. Austin, TX: The University of Texas at Austin, Technical Report CRWR 239.

## Cleveland, M. Todd.

- 2003 Addendum: Updated Existing Condition Assessment of the Wonderland Hotel. Atlanta, GA: Unpublished report prepared by TRC Garrow Associates, Inc.
- 2004 Cultural and Historic Landscape Assessment for the Elkmont Historic District, Great Smoky Mountains National Park, Sevier County, Tennessee. Atlanta, GA: Final report submitted to Great Smoky Mountains National Park by TRC Garrow Associates, Inc.

## Cleveland, T., L. McKee, and P. Webb

2002 Cultural Resources of the Elkmont Historic District, Great Smoky Mountains National Park, Sevier County, Tennessee. Atlanta, GA: Unpublished report with contributions by D.S. Leigh, S.G. Gaddis, and T. Benyshek.TRC Garrow Associates, Inc.

#### Click, R.C.

1983 "Computerized Backcountry Reservation System." Gatlinburg, TN: internal memorandum on file at Great Smoky Mountains National Park.

#### Cobb, B.

1984 A Field Guide to the Ferns and Their Related Families of Northeastern and Central North America. Houghton Mifflin Company, New York, New York and Boston, Massachusetts. 281 pp.

Code of Federal Regulations (CFR).

Title 40 Protection of the Environment, Chapter V: Council on Environmental Quality, Part 1500-1508. Available online at:

<a href="http://www.access.gpo.gov/nara/cfr/waisidx">http://www.access.gpo.gov/nara/cfr/waisidx</a> 99/40cfrv24 99.html

2000 Title 36, Chapter 1: National Park Service Department of the Interior, Part 51 Concessions Contract, 51.2: What is the policy underlying concessions contracts? Available online at: <a href="http://www.access.gpo.gov/nara/cfr/waisidx">http://www.access.gpo.gov/nara/cfr/waisidx</a> 00/36cfr51 00.html

2004 Title 23 Highways, Part 772, Procedures for Abatement of Traffic Noise and Construction Noise. U.S. Department of Transportation, FHWA.

Conservation Southeast, Inc.

Information extracted from "Pine Snake, *Pituophis melanoleucus* ssp. Includes Northern, Florida, Black and Louisiana Pine Snakes." Available on the Internet at <a href="http://www.conservationsoutheast.com/infops.htm">http://www.conservationsoutheast.com/infops.htm</a>.

Council on Environmental Quality

"Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act." *Code of Federal Regulations*, Title 40, Parts 1500-1508.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe

1979 Classification of Wetlands and Deepwater Habitats of the United States. (Version 04 DEC98).

Washington, D.C.: U.S. Department of the Interior, Fish and Wildlife Service. Available on the Internet on the Northern Prairie Wildlife Research Center home page at <a href="http://www.npwrc.usgs.gov/resource/1998/classwet.htm">http://www.npwrc.usgs.gov/resource/1998/classwet.htm</a>.

Cummings, K.S. and C.A. Mayer

1992 Field guide to freshwater mussels of the Midwest. Illinois Natural History Survey Manual 5. 194 pp.

Discover Life in America, Inc.

2002 "North American River Otter, *Lontra canadensis*." *All Taxa Biodiversity Inventory*. Available on the Internet at <a href="http://www.discoverlife.org/nh/tx/Vertebrata/Mammalia/Mustelidae/Lontra/canadensis/">http://www.discoverlife.org/nh/tx/Vertebrata/Mammalia/Mustelidae/Lontra/canadensis/</a>

2003 All Taxa Biodiversity Inventory. "Indiana Bat, Myotis sodalis." Available on the Internet at <a href="http://www.dlia.org/atbi/species/animals/vertebrates/mammals/vespertilionidae/Myotis\_sodalis.html">http://www.dlia.org/atbi/species/animals/vertebrates/mammals/vespertilionidae/Myotis\_sodalis.html</a>>.

2004 The Role of ATBI's in the Global Biodiversity Crisis: Notes from the Great Smokies ATBI. Web page available online at http://www.discoverlifeinamerica.org/atbi/about.html#date

Dudley, F.

1998-2002 "Wildflower guide, nodding trillium, *Trillium rugelii*." Available on the Internet from *Ashville Natural* at <a href="http://www.weaversites.com/ashevillenatural/trilliumnodding.html">http://www.weaversites.com/ashevillenatural/trilliumnodding.html</a>>.

Federal Register

1978 43 FR 56003, Nov. 29, 1978. Council on Environmental Quality Regulation 1508. Available online at: <a href="http://ceq.eh.doe.gov/nepa/regs/ceq/1508.htm#1508.7">http://ceq.eh.doe.gov/nepa/regs/ceq/1508.htm#1508.7</a>

Finger, J.R.

1984 The Eastern Band of Cherokees, 1819-1900. Knoxville, TN: University of Tennessee.

Georgia Department of Natural Resources

"Lysimachia fraseri." Protected Plants of Georgia. Available on the Internet at <a href="http://georgiawildlife.dnr.state.ga.us/assets/documents/lysifr.pdf">http://georgiawildlife.dnr.state.ga.us/assets/documents/lysifr.pdf</a> Accessed January 8, 2004>.

Gleason, H.A. and A. Cronquist.

1991 Manual of Vascular Plants of the Northeastern United States and Adjacent Canada, Second edition. The New York Botanical Garden. Bronx, New York. 910 pp.

Gray, N.

2002 Personal communication and interview with Nancy Gray, Great Smoky Mountains National Park Staff, on May 2, 2002.

2004 Great Smoky Mountains National Park (GRSM). Visitor use data 1993 to 2003

Greene, L.K

1996 *The Archaeology and History of the Cherokee Out Towns*. Knoxville, TN: Unpublished M.A. thesis, Department of Anthropology, University of Tennessee.

Hill, K.

2001 "Lontra canadensis (River otter)." Smithsonian Marine Station at Fort Pierce, Florida. Available on the Internet at <a href="http://www.sms.si.edu/irlspec/Lontra\_canade.htm">http://www.sms.si.edu/irlspec/Lontra\_canade.htm</a>>.

Hudson, C.M.

1990 *The Juan Pardo Expeditions: Exploration of the Carolinas and Tennessee, 1566 – 1568.* Washington, D.C.: Smithsonian Institution Press,

1997 Knights of Spain, Warriors of the Sun. Athens, GA: University of Georgia.

Isely, D.

1990 Vascular Flora of the Southeastern United States. Volume 3, Part 2. Chapel Hill NC: The University of North Carolina Press.

Jenkins, M.

2004 Personal communication between Mike Jenkins, ecologist at Great Smoky Mountains National Park and Rose Chmielewski, ecologist with TN & Aassociates on September 16, 2004.

Khiel, Anthony R.

2002 *Great Smoky Mountains National Park Soil Survey of the Elkmont Area.* Sevierville, TN: U.S. Department of Agriculture, Natural Resources Conservation Service.

2004 Personal communication with Anthony R. Khiel, soil scientist, U.S. Department of Agriculture, Natural Resources Conservation Service. Material included draft soils mapping of the Gatlinburg Quadrangle, soils legend, and map unit descriptions.

Kichman, S.

2004 E-mail message from Scott Kichman, forestry technician, National Park Service, to Barbara Eisenberg, wildlife biologist, TN & Associates, Inc., May 13, 2004, regarding non-native species in the Elkmont Historic District.

Knoxville News Sentinel (News Sentinel)

2004 "We Can't Afford to Let the Smokies Park Die". Newspaper Article, April 20, 2004.

#### Kreusch, E.

- 2003 Memorandum to Acting Superintendent: Report on Archeological Investigations for the Rehabilitation of Comfort Stations #542 & #578. On file, Great Smoky Mountains National Park.
- 2004 Personal communication between Erik Kreusch, Great Smoky Mountains Archeologist, and Paul Webb, Archeologist, TRC Garrow Associates, Inc., regarding NPS archeological work at Elkmont, May 19, 2004.

#### Lambert, R.S.

- 1958a "Oconaluftee Valley, 1800-1860: A Study of the Sources for Mountain History." *The North Carolina Historical Review* 35(4): 415-427.
- 1958b Logging in the Great Smoky Mountains National Park: A Report to the Superintendent. Gatlinburg, TN: On file at Great Smoky Mountains National Park.
- 1961 "Logging the Great Smokies, 1880-1930." *Tennessee Historical Quarterly*, December, pp. 350-363.

## Littlejohn, Margaret

1997 Great Smoky Mountains National Park Visitor Studies, Summer and Fall 1996: Report 92.

## Lodging Resources, Inc.

2004 *Historic Properties Management Analysis*. Amelia Island, FL: Final report prepared for the National Park Service, Great Smoky Mountains National Park by Lodging Resources, Inc.

## Mast, M.A. and J.T. Turk

1999 Environmental Characteristics and Water Quality of Hydrologic Benchmark Network Stations in the Eastern United States, 1963-95. U.S. Geological Survey Circular 1173-A. Available on the Internet at <a href="http://water.usgs.gov/pubs/circ/circ1173/circ1173a/chapter15.htm">http://water.usgs.gov/pubs/circ/circ1173a/chapter15.htm</a>.

#### McDonnell, J.A.

Draft Handbook for Oral History in the National Park Service. National Park Service. Washington, D.C. Available online at: <a href="http://www.cr.nps.gov/history/oh/oralh1.htm">http://www.cr.nps.gov/history/oh/oralh1.htm</a> (Accessed March 4, 2004).

## McGill Associates, P.A. (McGill Associates)

2004 *Infrastructure Report for Elkmont Historic District.* Sevierville, TN: prepared for the National Park Service, Great Smoky Mountains National Park.

## McGrath, T.H.

1998 Condition Assessment Report: The Appalachian Clubhouse at Elkmont in Great Smoky
Mountains National Park. Unpublished report submitted by Historic Preservation Training
Center, National Park Service to Great Smoky Mountains National Park.

2003 Condition Assessment Follow-Up of Wonderland Hotel and Memorandum. April 14, 2003.
Memorandum with Wonderland Hotel Interior Condition Assessment from Thomas H.
McGrath Jr., Superintendent, Historic Preservation Training Center (HPTC), National Park
Service to Chief of Maintenance, Great Smoky Mountains National Park.

#### Milius, S.

"U.S. Fireflies Flashing in Unison." *Science News*, March 13, 1999. Available on the Internet at <a href="http://www.findarticles.com/cf\_dls/m1200/11\_155/54296721/p1/article.jhtml">http://www.findarticles.com/cf\_dls/m1200/11\_155/54296721/p1/article.jhtml</a>.

## Minnigh, George

2002. Personal communication and interview with George Minnigh, National Park Service Staff Ranger: Backcountry, on April 30, 2002.

#### Moore, S.E. and M.A. Kulp

1994 "Annual Report, Great Smoky Mountains National Park, Resource Management, Fisheries Division." Gatlinburg, TN: on file at Great Smoky Mountains National Park.

# National Capital Planning Commission (NCPC).

- 2004a Environmental and Historic Preservation Policies and Procedures (69 FR 41299). Available online at: <a href="http://www.ncpc.gov/info/environmental.html">http://www.ncpc.gov/info/environmental.html</a>
- 2004b Final Environmental and Historic Preservation Policies and Procedures. Available online at: <a href="http://www.ncpc.gov/whats\_new/EandHPpolicies.pdf">http://www.ncpc.gov/whats\_new/EandHPpolicies.pdf</a>

## National Park Service, U.S. Department of the Interior

- 1969 "Naturalist Program Brochure." Gatlinburg, TN: unpublished brochure on file at Great Smoky Mountains National Park.
- 1975 "Visitor Program Brochure." Gatlinburg, TN: unpublished brochure on file at Great Smoky Mountains National Park.
- 1977 Cultural Resource Management Guideline. Release Number 5. Washington, D.C.
- 1982a Final Environmental Impact Statement and General Management Plan, Great Smoky Mountains National Park / North Carolina-Tennessee, Denver, CO: Denver Service Center.
- 1982b General Management Plan, Great Smoky Mountains National Park, North Carolina-Tennessee.

  Denver Service Center, National Park Service.
- 1984. Office of Policy. Director's Order 87A: Park Road Standards. Available online at: <a href="http://www.nps.gov/policy/DOrders/ParkRoadStandards.pdf">http://www.nps.gov/policy/DOrders/ParkRoadStandards.pdf</a>
- 1987-1993 "Great Smoky Mountain Monthly Public Use Reports." Gatlinburg, TN: unpublished reports on file at Great Smoky Mountains National Park.
- 1993. Statistical Abstract 1993. National Park Service. Denver Service Center. Denver, Colorado.
- 1997a National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation
- 1997b. VERP: The Visitor Experience and Resource Protection (VERP) Framework: A Handbook for Planners and Managers. USDI NPS Denver Service Center. 103 pp.
- 1997c National Register Bulletin 16: Guidelines for Completing National egister of Historic Places Forms
- 1998a NPS 28-Cultural Resource Management Guideline.

- 1998b. Director's Order #2: Park Planning. Available online at: http://www.nps.gov/refdesk/DOrders/DOrder2.html
- 1998c *Director's Order #28: Cultural Resource Management*. Available on the Internet at <a href="http://www.nps.gov/policy/DOrders/DOrder28.html">http://www.nps.gov/policy/DOrders/DOrder28.html</a>.
- 1998d. Director's Order #28B: Archaeology. Available online at: http://www.nps.gov/policy/DOrders/DO28B--14-day.htm
- 2000 Draft Environmental Assessment for the Release and Establishment of Pseudoscymnus tsugae (Coleoptera: Coccinellidae) as Biological Control Agent for Hemlock Wooly Adelgid (Adelges tsugae) at Delaware Water Gap National Recreational Area. Northeast Region. Available on the Internet at <a href="http://data2.itc.nps.gov/nature/documents/ACFF5B.htm">http://data2.itc.nps.gov/nature/documents/ACFF5B.htm</a>.
- 2001a Great Smoky Mountains National Park Comprehensive Resource Education Plan. January 2001. 83 pp.
- 2001b "Great Smoky Mountains National Park Briefing Statement, December 2001." Available on the Internet at <a href="http://data2.itc.nps.gov/parks/grsm/ppdocuments/air\_briefingstmt.pdf">http://data2.itc.nps.gov/parks/grsm/ppdocuments/air\_briefingstmt.pdf</a>>.
- 2001c "Great Smoky Mountains National Park Management Folio #2: Air Quality." Available on the Internet at <a href="http://www.nps.gov/grsm/gsmsite/airquality01.pdf">http://www.nps.gov/grsm/gsmsite/airquality01.pdf</a>.
- 2001d. Memorandum. Subject: Director's Order #12: Conservation Planning, Environmental Impact Analysis, and Decision-Making. Available online at: http://www.nps.gov/policy/DOrders/DOrder12.html
- 2001e Director's Order #12 and Handbook: Conservation Planning, Environmental Impact Analysis, and Decision Making. Available online at <a href="http://www.nps.gov/policy/DOrders/RM12.pdf">http://www.nps.gov/policy/DOrders/RM12.pdf</a>
- 2002-2003. "Great Smoky Mountain Monthly Public Use Reports." Gatlinburg, TN: unpublished reports on file at Great Smoky Mountains National Park.
- 2002a Draft Elkmont Historic District Visitor Experience and Recreational Use Report. 43 pp.
- 2002b "Draft Elkmont Historic District Inventory of Natural Resources." Gatlinburg, TN: unpublished report on file at Great Smoky Mountains National Park.
- 2002c "May 16, 2002 News Release: New Forest Insect Pest Discovered in Smokies." Available on the Internet at <www.nps.gov/grsm/gsmsite/hemlockadelgidrel.htm>.
- 2002d "The No Zone: Smoky Mountain Sightline." *Resource Issues in Great Smoky Mountain National Park*, Fall/Winter 2002, Vol. 3, No. 2. Energy, Environment and Resources Center at University of Tennessee. Available on the Internet at <a href="http://eerc.ra.utk.edu/sightline/SightlineV2N1.html#anchor278832">http://eerc.ra.utk.edu/sightline/SightlineV2N1.html#anchor278832</a>>.
- 2002e. Office of Policy. Director's Order #77-1: Wetland Protection. Web page available online at: <a href="http://www.nps.gov/policy/DOrders/DO77-1-Reissue.htm">http://www.nps.gov/policy/DOrders/DO77-1-Reissue.htm</a>. Wetland Protection Procedural Manual available at: <a href="http://www.nature.nps.gov/wetland/indexpro.html">http://www.nature.nps.gov/wetland/indexpro.html</a>
- 2003a *Great Smoky Mountains National Park.* Washington, D.C.: Brochure 2003 496-196/40433 produced by the U.S. Government Printing Office.
- 2003b Draft Environmental Impact Statement for a Proposed Land Exchange between The Eastern Band of Cherokee Indians at the Great Smoky Mountains National Park. Gatlinburg, TN: available on the Internet at <a href="http://www.npslandexchange.com/EIS.htm">http://www.npslandexchange.com/EIS.htm</a>.

- 2003c "Hemlock Woolly Adelgid-Briefing Statement." Gatlinburg, TN: available on the Internet at <a href="https://www.nps.gov/grsm/pphtml/newsdetail6403.html">www.nps.gov/grsm/pphtml/newsdetail6403.html</a>>.
- 2003d Interim Technical Guidance on Assessing Impacts and Impairment to Natural Resources.

  Natural Resource Program Center
- 2003e. Office of Policy. Director's Order #77-2: Floodplain Management. Web page available online at: <a href="http://www.nps.gov/policy/DOrders/DO77-2--Floodplains.pdf">http://www.nps.gov/policy/DOrders/DO77-2--Floodplains.pdf</a>. Floodplain Management Procedural Manual available at: <a href="http://www.nature.nps.gov/rm77/floodplain.htm">http://www.nature.nps.gov/rm77/floodplain.htm</a>
- 2003f. Office of Policy. Director's Order #83: Public Health. Web page available online at: <a href="http://www.nps.gov/policy/DOrders/DOrder83.html">http://www.nps.gov/policy/DOrders/DOrder83.html</a>
- Procedural Manual available at: http://data2.itc.nps.gov/npspolicy/DOrders.cfm
- 2004a National Park Service National Register Publications. Available at: <a href="http://www.cr.nps.gov/nr/publications/bulletins.htm">http://www.cr.nps.gov/nr/publications/bulletins.htm</a>
- 2004b Information extracted from the Great Smoky Mountains National Park Facts web page. Available on the Internt at <a href="http://www.nps.gov/grsm/pphtml/facts.html">http://www.nps.gov/grsm/pphtml/facts.html</a>.>
- 2004c Information extracted from *Great Smoky Mountains News*. Gatlinburg, TN: available on the Internet at <a href="http://www.nps.gov/grsm/pphtml/news.html">http://www.nps.gov/grsm/pphtml/news.html</a>>.
- 2004d "Briefing Statement: Cades Cove Transportation and Development Planning, Great Smoky Mountains National Park." Gatlinburg, TN: available on the Internet at <a href="http://data2.itc.nps.gov/parks/grsm/ppdocuments/CadesCove%202-04.pdf">http://data2.itc.nps.gov/parks/grsm/ppdocuments/CadesCove%202-04.pdf</a>.
- 2004e "Briefing Statement: Proposed North Shore Road, Great Smoky Mountains National Park." Gatlinburg, TN: available on the Internet at <a href="http://data2.itc.nps.gov/parks/grsm/ppdocuments/Northshore%20Road%203-04.pdf">http://data2.itc.nps.gov/parks/grsm/ppdocuments/Northshore%20Road%203-04.pdf</a>>.
- 2004f Standards for Preservation and Guidelines for Preserving Historic Buildings. Available on the Internet at <a href="http://www2.cr.nps.gov/tps/standguide">http://www2.cr.nps.gov/tps/standguide</a>>.
- 2004g *Great Smoky Mountains National Park Resource Management and Science Insider*. Issue 222. May 3, 2004. Available on the Internet at <a href="http://www.nps.gov/grsm/gsmsite/update222.html">http://www.nps.gov/grsm/gsmsite/update222.html</a>.
- 2004h "Great Smoky Mountains National Park Briefing Statement, May, 2004." Gatlinburg, TN: unpublished document on file at Great Smoky Mountains National Park.
- 2004i. National Park Service Director's Order #6. Available online at: <a href="http://www.nps.gov/policy/DOrders/DOrder6.html">http://www.nps.gov/policy/DOrders/DOrder6.html</a>
- 2004j. National Park Service Director's Order #42. Available online at: http://www.nps.gov/access/directors\_order.htm
- 2004k. Office of Policy. Natural Resource Reference Manual #77. Web page available online at: <a href="http://www.nature.nps.gov/rm77/">http://www.nature.nps.gov/rm77/</a>
- 2006 Management Policies 2006. [Washington, D.C.].
- 2008a Briefing Statement: Proposed North Shore Road, Great Smoky Mountains National Park." Gatlinburg, TN

National Preservation Institute (NPI)

2004 Substituting NEPA for Section 106 Review and NEPA and Section 106 of the National Historic Preservation Act. Web page available at: http://www.npi.org/

#### NatureServe

- 1996 Official correspondence from Karen Patterson, Ecoregional Ecologist and Alan S. Weakley, Senior Regional Ecologist to Keith Langdon, Supervisory Biologist of Great Smoky Mountains National Park regarding forest communities of the Elkmont area, January 23, 1996.
- 2003 *NatureServe Explorer: An Online Encyclopedia of Life*. Version 1.8. Arlington, VA. Available on the Internet at <a href="http://www.natureserve.org/explorer/">http://www.natureserve.org/explorer/</a>>.

## Data searches for species can be conducted from

<a href="http://www.natureserve.org/explorer/servlet/NatureServe?init=Species">http://www.natureserve.org/explorer/servlet/NatureServe?init=Species</a>>.

## Accipiter striatus (sharp shinned hawk):

http://www.natureserve.org/explorer/servlet/NatureServe?menuselect=none&sourceTemplate=tabular\_report.wmt&loadTemplate=species\_RptComprehensive.wmt&selectedReport=RptComprehensive.wmt&summaryView=tabular\_report.wmt&elKey=106313&paging=home&save=true&startIndex=1&nextStartIndex=1&reset=false&offPageSelectedElKey=106313&fPageSelectedElType=species&offPageYesNo=true&post\_processes=&radiobutton=radiobutton&selectedIndexes=106313&selectedIndexes=102890&selectedIndexes=100157&menuselectfooter=none

#### Cardamine flagellifera (running bittercress):

<a href="http://www.natureserve.org/explorer/servlet/NatureServe?menuselect=none&sourceTemplate=tabular\_report.wmt&loadTemplate=species\_RptComprehensive.wmt&selectedReport=RptComprehensive.wmt&summaryView=tabular\_report.wmt&elKey=PDBRA0K0E0&paging=home&save=true&startIndex=1&nextStartIndex=1&reset=false&offPageSelectedElKey=PDBRA0K0E0&offPageSelectedElType=species&offPageYesNo=true&post\_processes=&radiobutton=radiobutton&selectedIndexes=PDBRA0K0E0&menuselectfooter=none>.

#### Carpiodes velifer (highfin carpsucker):

<a href="http://www.natureserve.org/explorer/servlet/NatureServe?menuselect=none&sourceTemplate=tabular\_report.wmt&loadTemplate=species\_RptComprehensive.wmt&selectedReport=RptComprehensive.wmt&summaryView=tabular\_report.wmt&elKey=106190&paging=home&save=true&startIndex=1&nextStartIndex=1&reset=false&offPageSelectedElKey=106190&offPageSelectedElType=species&offPageYesNo=true&post\_processes=&radiobutton=radiobutton&selectedIndexes=106190&menuselectfooter=none>.

## Contopus cooperi (olive-sided flycatcher):

<a href="http://www.natureserve.org/explorer/servlet/NatureServe?menuselect=none&sourceTempl">http://www.natureserve.org/explorer/servlet/NatureServe?menuselect=none&sourceTempl</a> ate=tabular\_report.wmt&loadTemplate=species\_RptComprehensive.wmt&selectedReport= RptComprehensive.wmt&summaryView=tabular\_report.wmt&elKey=102228&paging=ho\_me&save=true&startIndex=1&nextStartIndex=1&reset=false&offPageSelectedElKey=1022\_28&offPageSelectedElType=species&offPageYesNo=true&post\_processes=&radiobutton=r\_adiobutton&selectedIndexes=102228&menuselectfooter=none>.

## Corvus corax (common raven):

<a href="http://www.natureserve.org/explorer/servlet/NatureServe?menuselect=none&sourceTemplate=tabular report.wmt&loadTemplate=species RptComprehensive.wmt&selectedReport=RptComprehensive.wmt&summaryView=tabular\_report.wmt&elKey=ABPAV10110&pagi

ng=home&save=true&startIndex=1&nextStartIndex=1&reset=false&offPageSelectedElKey =ABPAV10110&offPageSelectedElType=species&offPageYesNo=true&post\_processes=& radiobutton=radiobutton&selectedIndexes=ABPAV10110&menuselectfooter=none>.

# Cycleptus elongatus (blue sucker):

<a href="http://www.natureserve.org/explorer/servlet/NatureServe?menuselect=none&sourceTemplate=tabular\_report.wmt&loadTemplate=species\_RptComprehensive.wmt&selectedReport=RptComprehensive.wmt&summaryView=tabular\_report.wmt&elKey=AFCJC04010&paging=home&save=true&startIndex=1&nextStartIndex=1&reset=false&offPageSelectedElKey=AFCJC04010&offPageSelectedElType=species&offPageYesNo=true&post\_processes=&radiobutton=radiobutton&selectedIndexes=AFCJC04010&menuselectfooter=none>.

#### Desmognathus wrighti (pigmy salamander):

<a href="http://www.natureserve.org/explorer/servlet/NatureServe?menuselect=none&sourceTemplate=tabular\_report.wmt&loadTemplate=species\_RptComprehensive.wmt&selectedReport=RptComprehensive.wmt&summaryView=tabular\_report.wmt&elKey=102489&paging=home&save=true&startIndex=1&nextStartIndex=1&reset=false&offPageSelectedElKey=102489&offPageSelectedElType=species&offPageYesNo=true&post\_processes=&radiobutton=radiobutton&selectedIndexes=102489&menuselectfooter=none>.

#### Falco peregrinus (peregrine falcon):

<a href="http://www.natureserve.org/explorer/servlet/NatureServe?menuselect=none&sourceTemplate=tabular\_report.wmt&loadTemplate=species\_RptComprehensive.wmt&selectedReport=RptComprehensive.wmt&summaryView=tabular\_report.wmt&elKey=ABNKD06070&paging=home&save=true&startIndex=1&nextStartIndex=1&reset=false&offPageSelectedElKey=ABNKD06070&offPageSelectedElType=species&offPageYesNo=true&post\_processes=&radiobutton=radiobutton&selectedIndexes=ABNKD06070&selectedIndexes=ABNKD06071&selectedIndexes=ABNKD06073&selectedIndexes=ABNKD06074&menuselectfooter=none">hotologation=none</a>.

#### Geum radiatum (spreading avens):

<a href="http://www.natureserve.org/explorer/servlet/NatureServe?menuselect=none&sourceTemplate=tabular\_report.wmt&loadTemplate=species\_RptComprehensive.wmt&selectedReport=RptComprehensive.wmt&summaryView=tabular\_report.wmt&elKey=PDROS0S0C0&paging=home&save=true&startIndex=1&nextStartIndex=1&reset=false&offPageSelectedElKey=PDROS0S0C0&offPageSelectedElType=species&offPageYesNo=true&post\_processes=&radiobutton=radiobutton&selectedIndexes=PDROS0S0C0&menuselectfooter=none>.

#### Haliaeetus leucocephalus (bald eagle):

<a href="http://www.natureserve.org/explorer/servlet/NatureServe?menuselect=none&sourceTemplate=tabular\_report.wmt&loadTemplate=species\_RptComprehensive.wmt&selectedReport=RptComprehensive.wmt&summaryView=tabular\_report.wmt&elKey=104470&paging=home&save=true&startIndex=1&nextStartIndex=1&reset=false&offPageSelectedElKey=104470&offPageSelectedElType=species&offPageYesNo=true&post\_processes=&radiobutton=radiobutton&selectedIndexes=104470&selectedIndexes=106134&menuselectfooter=none>.

#### Hymenophyllum tayloriae (gorge filmy fern):

<a href="http://www.natureserve.org/explorer/servlet/NatureServe?menuselect=none&sourceTemplate=tabular\_report.wmt&loadTemplate=species\_RptComprehensive.wmt&selectedReport=RptComprehensive.wmt&summaryView=tabular\_report.wmt&elKey=132153&paging=home&save=true&startIndex=1&nextStartIndex=1&reset=false&offPageSelectedElKey=1321

<u>53&offPageSelectedElType=species&offPageYesNo=true&post\_processes=&radiobutton=radiobutton&selectedIndexes=132153&menuselectfooter=none>.</u>

#### Limnothlypis swainsonii (Swainson's warbler):

<a href="http://www.natureserve.org/explorer/servlet/NatureServe?menuselect=none&sourceTemplate=tabular\_report.wmt&loadTemplate=species\_RptComprehensive.wmt&selectedReport=RptComprehensive.wmt&summaryView=tabular\_report.wmt&elKey=103514&paging=home&save=true&startIndex=1&nextStartIndex=1&reset=false&offPageSelectedElKey=103514&offPageSelectedElType=species&offPageYesNo=true&post\_processes=&radiobutton=radiobutton&selectedIndexes=103514&menuselectfooter=none>.

## Lysimachia fraseri (Fraser loosestrife):

<a href="http://www.natureserve.org/explorer/servlet/NatureServe?menuselect=none&sourceTemplate=tabular\_report.wmt&loadTemplate=species\_RptComprehensive.wmt&selectedReport=RptComprehensive.wmt&summaryView=tabular\_report.wmt&elKey=154093&paging=home&save=true&startIndex=1&nextStartIndex=1&reset=false&offPageSelectedElKey=154093&offPageSelectedElType=species&offPageYesNo=true&post\_processes=&radiobutton=radiobutton&selectedIndexes=154093&menuselectfooter=none>.

## Microhexura montivaga (spruce-fir moss spider):

<a href="http://www.natureserve.org/explorer/servlet/NatureServe?menuselect=none&sourceTemplate=tabular\_report.wmt&loadTemplate=species\_RptComprehensive.wmt&selectedReport=RptComprehensive.wmt&summaryView=tabular\_report.wmt&elKey=ILARA33010&paging=home&save=true&startIndex=1&nextStartIndex=1&reset=false&offPageSelectedElKey=ILARA33010&offPageSelectedElType=species&offPageYesNo=true&post\_processes=&radiobutton=radiobutton&selectedIndexes=ILARA33010&menuselectfooter=none>.

#### *Myotis sodalis* (Indiana bat):

<a href="http://www.natureserve.org/explorer/servlet/NatureServe?menuselect=none&sourceTemplate=tabular\_report.wmt&loadTemplate=species\_RptComprehensive.wmt&selectedReport=RptComprehensive.wmt&summaryView=tabular\_report.wmt&elKey=AMACC01100&paging=home&save=true&startIndex=1&nextStartIndex=1&reset=false&offPageSelectedElKey=AMACC01100&offPageSelectedElType=species&offPageYesNo=true&post\_processes=&radiobutton=radiobutton&selectedIndexes=AMACC01100&menuselectfooter=none>.

#### Percina aurantiaca (tangerine darter):

<a href="http://www.natureserve.org/explorer/servlet/NatureServe?menuselect=none&sourceTemplate=tabular\_report.wmt&loadTemplate=species\_RptComprehensive.wmt&selectedReport=RptComprehensive.wmt&summaryView=tabular\_report.wmt&elKey=100432&paging=home&save=true&startIndex=1&nextStartIndex=1&reset=false&offPageSelectedElKey=100432&offPageSelectedElType=species&offPageYesNo=true&post\_processes=&radiobutton=radiobutton&selectedIndexes=100432&menuselectfooter=none>.

## Percina macrocephala (longhead darter):

#### Phoxinus tennesseensis (Tennessee dace):

<a href="http://www.natureserve.org/explorer/servlet/NatureServe?menuselect=none&sourceTemplate=tabular\_report.wmt&loadTemplate=species\_RptComprehensive.wmt&selectedReport=RptComprehensive.wmt&summaryView=tabular\_report.wmt&elKey=105508&paging=home&save=true&startIndex=1&nextStartIndex=1&reset=false&offPageSelectedElKey=105508&offPageSelectedElType=species&offPageYesNo=true&post\_processes=&radiobutton=radiobutton&selectedIndexes=105508&menuselectfooter=none>.

#### Pituophis melanoleucus melanoleucus (northern pine snake):

<http://www.natureserve.org/explorer/servlet/NatureServe?menuselect=none&sourceTempl ate=tabular\_report.wmt&loadTemplate=species\_RptComprehensive.wmt&selectedReport=RptComprehensive.wmt&summaryView=tabular\_report.wmt&elKey=ARADB26012&pagi ng=home&save=true&startIndex=1&nextStartIndex=1&reset=false&offPageSelectedElKey=ARADB26010&offPageSelectedElType=species&offPageYesNo=true&post\_processes=&radiobutton=radiobutton&selectedIndexes=ARADB26010&selectedIndexes=ARADB26011&selectedIndexes=ARADB26013&menuselectfooter=n one>.

## Plethobasus cooperianus (orange-footed pearly mussel):

<a href="http://www.natureserve.org/explorer/servlet/NatureServe?menuselect=none&sourceTemplate=tabular\_report.wmt&loadTemplate=species\_RptComprehensive.wmt&selectedReport=RptComprehensive.wmt&summaryView=tabular\_report.wmt&elKey=IMBIV34020&paging=home&save=true&startIndex=1&nextStartIndex=1&reset=false&offPageSelectedElKey=IMBIV34020&offPageSelectedElType=species&offPageYesNo=true&post\_processes=&radiobutton=radiobutton&selectedIndexes=IMBIV34020&menuselectfooter=none>.

#### Sphyrapicus varius (Yellow bellied sapsucker):

<a href="http://www.natureserve.org/explorer/servlet/NatureServe?menuselect=none&sourceTemplate=tabular\_report.wmt&loadTemplate=species\_RptComprehensive.wmt&selectedReport=RptComprehensive.wmt&summaryView=tabular\_report.wmt&elKey=102671&paging=home&save=true&startIndex=1&nextStartIndex=1&reset=false&offPageSelectedElKey=102671&offPageSelectedElType=species&offPageYesNo=true&post\_processes=&radiobutton=radiobutton&selectedIndexes=102671&menuselectfooter=none>.

2005 NatureServe Explorer: An Online Encyclopedia of Life. Version 4.2. Arlington, VA. Available on the Internet at <a href="http://www.natureserve.org/explorer">http://www.natureserve.org/explorer</a>.

## Botrychium matricariifolium (Chamomile grapefern):

<a href="http://www.natureserve.org/explorer/servlet/NatureServe?menuselect=none&sourceTemplate=tabular\_report.wmt&loadTemplate=species\_RptComprehensive.wmt&selectedReport=RptComprehensive.wmt&summaryView=tabular\_report.wmt&elKey=130567&paging=home&save=true&startIndex=1&nextStartIndex=1&reset=false&offPageSelectedElKey=1528\_28&offPageSelectedElType=species&offPageYesNo=true&post\_processes=&radiobutton=radiobutton&selectedIndexes=152828&selectedIndexes=130221&selectedIndexes=133668&selectedIndexes=146935&selectedIndexes=157067&selectedIndexes=145970&selectedIndexes=154829&selectedIndexes=156523&selectedIndexes=132177&selectedIndexes=146565&selectedIndexes=157840&selectedIndexes=131939&selectedIndexes=129282&selectedIndexes=154775&selectedIndexes=140942&selectedIndexes=155424&selectedIndexes=147162&selectedIndexes=146556&selectedIndexes=130567&selectedIndexes=156367&menuselectfooter=none>.

Nearctica.com, Inc.

2003 Information extracted from "Eastern wildflowers: Rough Hawkweed (*Hieracium scabrum*) Michx." Available on the Internet at <a href="http://www.nearctica.com/flowers/composit/lactuca/Hscabr.htm">http://www.nearctica.com/flowers/composit/lactuca/Hscabr.htm</a>.

New Jersey Division of Fish and Wildlife

2004 Information extracted from "Northern Pine Snake – September Species of the Month." Available on the Internet at <a href="http://www.nj.gov/dep/fgw/ensp/somsept.htm">http://www.nj.gov/dep/fgw/ensp/somsept.htm</a>.

Nichols, B.

2004 Personal communication between Becky Nichols, entomologist at Great Smoky Mountains National Park and Rose Chmielewski, ecologist with TN & Associates on September 10, 2004.

North Carolina Department of Environment, Health and Natural Resources; Natural Heritage Program

1996 Official correspondence from Michael P. Schafale, Natural Heritage Program Director to Keith Langdon, Supervisory Biologist of Great Smoky Mountains National Park regarding forest communities of the Elkmont area, January 16, 1996.

2003 *Guide to Federally Listed Endangered and Threatened Species of North Carolina*. Available on the Internet at <a href="http://www.ils.unc.edu/parkproject/nhp/publications/guide.html">http://www.ils.unc.edu/parkproject/nhp/publications/guide.html</a>.

Spreading avens fact sheet: <a href="http://www.ncsparks.net/nhp/guide/115.pdf">http://www.ncsparks.net/nhp/guide/115.pdf</a>

Northern flying squirrel fact sheet: <a href="http://www.ncsparks.net/nhp/guide/7.pdf">http://www.ncsparks.net/nhp/guide/7.pdf</a>

Indiana bat fact sheet: http://www.ncsparks.net/nhp/guide/11.pdf

Spruce -fir moss spider fact sheet: <a href="http://www.ncsparks.net/nhp/guide/69.pdf">http://www.ncsparks.net/nhp/guide/69.pdf</a>

North Carolina State University

2004 Information extracted from "Watershedss, a Decision Support System for Nonpoint Source Pollution Control: Educational Component, Water Quality and Land Treatment." Available on the Internet at <a href="http://www.water.ncsu.edu/watershedss/">http://www.water.ncsu.edu/watershedss/</a>>, then click on educational component.

Olishifski, J.B. and E.R. Harford

1975 "Industrial Noise and Hearing Conversation" *World Book, Rand McNally Atlas of the Human Body, Encyclopedia Americana*. Researched by N. Jane Hunt and published in the *Chicago Tribune* in an illustrated graphic by Tom Heinz

Omara-Otunnu, E.

2003 "Neurobiologist Unraveling Mysteries of Fireflies' Flash." Available on the Internet at <a href="http://www.advance.uconn.edu/03062315.htm">http://www.advance.uconn.edu/03062315.htm</a>.

Pace, R.A.

2001 Archeological Survey of Lower Middle Creek Road (Teaster Lane to Centerview Road), Sevier County, Tennessee. Franklin, TN: Submitted to Wilber Smith Associates, Knoxville, Tennessee and the City of Pigeon Forge, Tennessee by DuVall and Associates.

Pennsylvania Department of Conservation and Natural Resources

Information extracted from "Longhead Darter (*Percina macrocephala*)." Available on the Internet at <a href="http://www.dcnr.state.pa.us/wrcf/ldart.htm">http://www.dcnr.state.pa.us/wrcf/ldart.htm</a>.

Petrides, G.A.

1998 A Field Guide to Eastern Trees. Boston, MA and New York, NY: Houghton Mifflin Company.

Pierce, D.S.

2000 *The Great Smokies: From Natural Habitat to National Park.* Knoxville, TN: University of Tennessee.

River Network.

2004 Understanding the Clean Water Act. Portland Oregon. An online course available at: http://www.cleanwateract.org/pages/about.htm

Royce, C.C.

1884 Map of the Former Territorial Limits of the "Nation of" Cherokee Indians. Washington, D.C.: Smithsonian Institution.

Runkle, James R.

1982 "Patterns of Disturbance in Some Old-Growth Mesic Forests of Eastern North America." *Ecology* 63: 1533-1546.

Rushton, B.

2002 "Infiltration Opportunities in Parking-Lot Designs Reduce Runoff and Pollution." *The Journal for Surface Water Quality Professionals, Stormwater*. Available on the Internet at <a href="http://www.forester.net/sw">http://www.forester.net/sw</a> 0206 infiltration.html>.

Schafale, M.P. and A.S. Weakley.

1990 Classification of the natural communities of North Carolina, third approximation. North Carolina Natural Heritage Program, Division of Parks and Recreation, N.C. Department of Environment Health and Natural Resources. Raleigh, NC. 323 pp.

Schlatter, J.

1972 "Great Smokies Trails: The Backcountry Permit System." The Environmental Journal, 13-17.

Schmidt, R.G. and W.S. Hooks

1994 Whistle over the Mountains: Timber, Track and Trails in the Tennessee Smokies. Yellow Springs, OH: Graphicom Press.

Schroedl, G.

2000 "Cherokee Ethnohistory and Archaeology from 1540 to 1838." In *Indians of the Greater Southeast: Historical Archaeology and Ethnohistory*, edited by Bonnie G. McEwan, pp. 204 to 241. Gainesville, FL: University of Florida.

The Secretary of the Interior

The Secretary of the Interior's Standards for the Treatment of Historic Properties: with Guidelines for Preserving, Rehabilitating, Restoring & Reconstructing Historic Buildings. By Kay D. Weeks and Anne E. Grimmer. Washington, D.C.: National Park Service, Preservation Assistance Division, Cultural Resource Stewardship and Partnerships, Heritage Preservation Services.

1995b The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes. Washington, D.C.: National Park Service, Historic Landscape Initiative.

2005 The Secretary of the Interior's Standards for the Treatment of Historic Properties. Washington, D.C.: National Park Service.

## **Sevier County**

- 1910 Property deed from Little River Lumber Company to the Appalachian Club. Sevierville, TN: Deed book 16, pp. 343-345, February 11, 1910. On file at Sevier County Courthouse.
- 1919 Property deed. Sevierville, TN: Deed Books 40:228: 288:216. On file at Sevier County Courthouse.
- Shelby, B. and T.A. Heberlein.
- 1986 Carrying Capacity in Recreation Settings. Corvallis, Oregon. Oregon State University Press Smith, B.A
  - 1979 "Distribution of Eighteenth-Century Cherokee Settlements." In *The Cherokee Indian Nation: a Troubled History*, edited by Duane H. King, pp. 46-60. Knoxville, TN: University of Tennessee.

Southern Appalachian Mountains Initiative (SAMI)

2002 Final Report. August 2002. Available online at: http://www.saminet.org/reports/DraftandFinalrpts/SAMI%20Final%20Report.pdf

#### Stanislaus Council of Governments

2001 "Chapter 14: Aesthetic." In *Draft Program Environmental Impact Report, Regional Transportation Plan*. Available on the Internet at <a href="http://www.stancog.org/pdf">http://www.stancog.org/pdf</a> files/combined 14-17.pdf>.

#### Taylor, S.W.

2001 The New South's New Frontier: A Social History of Economic Development in Southwestern North Carolina. Gainesville, FL: University of Florida.

#### Tennessean.com.

2003 TDOT Scuttles Pair of East state Highway Projects. Online article dated October 23, 2003

Tennessee Department of Environmental Conservation

Information extracted from "Rare Species Protection Program." Available on the Internet at <a href="http://www.state.tn.us/environment/nh/rppp.php">http://www.state.tn.us/environment/nh/rppp.php</a>>.

Tennessee Department of Environmental Conservation, Division of Natural Heritage

- 1996 Official correspondence from Milo Pyne, Botanist/Community Ecologist to Keith Langdon, Supervisory Biologist of Great Smoky Mountains National Park regarding forest communities of the Elkmont area, January 29, 1996.
- 2003 Information extracted from the Internet page defining state, federal and global status terminology. Available at <a href="http://www.state.tn.us/environment/nh/tnplants.php">http://www.state.tn.us/environment/nh/tnplants.php</a>>.
- 2004 "Rare and Endangered Species by County." Available on the Internet at Sevier County: <a href="http://www.state.tn.us/environment/nh/species/list.php?county=sevier">http://www.state.tn.us/environment/nh/species/list.php?county=sevier</a>>
  Blount County: <a href="http://www.state.tn.us/environment/nh/species/list.php?county=blount">http://www.state.tn.us/environment/nh/species/list.php?county=cocke</a>>.

  Cocke County: <a href="http://www.state.tn.us/environment/nh/species/list.php?county=cocke">http://www.state.tn.us/environment/nh/species/list.php?county=cocke</a>>.

Tennessee Department of Environmental Conservation, Tennessee Historical Commission

2003 Official correspondence from Herbert L. Harper, Executive Director and Deputy State Historic Preservation Officer, to Phillip A. Francis, Assistant Superintendent of Great Smoky Mountains National Park regarding National Park Service, Wonderland Hotel Structural Report, Unincorporated, Sevier County, December 8, 2003.

Tennessee Department of Environmental Conservation, Tennessee Water Quality Control Board, Division of Water Pollution Control

2004 "Chapter 1200-4-3: General Water Quality Criteria." Rules of Tennessee Water Quality Control Board Division of Water Pollution Control.

Tennessee Ornithological Society

2002 "2002 Fall Symposium Program." Available on the Internet at <a href="http://www.tnbirds.org/Fall02-symposium.htm">http://www.tnbirds.org/Fall02-symposium.htm</a>.

Tennessee Wildlife Resources Agency (TWRA)

2002 Amphibian Declines. Web page available online at: http://www.state.tn.us/twra/amdeclin.html

#### Thomason, P., M. A. Williams, and L. Brown

1993 Elkmont Historic District, Great Smoky Mountains National Park, National Register of Historic Places Registration Form. Nashville, TN: On file at the Tennessee Historical Commission.

#### Transportation Research Board

2000 *Highway Capacity Manual.* ///Parsons note: need to complete citation for this document, which was used in Section 3.4.3.5.

///Is the *Highway Capacity Software 2000* from this same source? If yes, need to add that citation here also.

United Nations Educational, Scientific, and Cultural Organization (UNESCO)

Information extracted from "Frequently Asked Questions on Biosphere Reserves." Available on the Internet at <a href="http://www.unesco.org/mab/nutshell.htm">http://www.unesco.org/mab/nutshell.htm</a>>.

## U.S. Army Corps of Engineers

1999a *Highway Methodology Workbook*. New England District. Available on the Internet at: <a href="http://www.nae.usace.army.mil/reg/hwsplmnt.pdf">http://www.nae.usace.army.mil/reg/hwsplmnt.pdf</a>>.

1999b Highway Methodology Workbook Supplement: Wetland Functional Values, a Descriptive Approach. Brochure NAEEP-360-1-30a.

1987 Corps of Engineers Delineation Manual. U.S. Army Engineer Waterways Experiment Station. Technical Report Y-87-1. Vicksburg, Mississippi. 100 pp. + appendices.

## U.S. Census Bureau.

1990 Information extracted from "DP-5. Housing Characteristics: 1990. Geographic Area: Sevier County Tennessee. Available on the Internet at

- <a href="http://factfinder.census.gov/servlet/BasicFactsTable?\_lang=en&\_vt\_name=DEC\_1990\_STF3">http://factfinder.census.gov/servlet/BasicFactsTable?\_lang=en&\_vt\_name=DEC\_1990\_STF3</a> DP5& geo id=05000US47155>.
- 2000a Information extracted from "Quick Tables, DP-3, Profile of Selected Economic Characteristics: 2000. Geographic Area: Sevier County, Tennessee." Available on the Internet at <a href="http://factfinder.census.gov/servlet/BasicFactsTable?lang=en&vt\_name=DEC\_2000\_SF\_3\_U\_DP3&geo\_id=05000US47155>">http://factfinder.census.gov/servlet/BasicFactsTable?lang=en&vt\_name=DEC\_2000\_SF\_3\_U\_DP3&geo\_id=05000US47155>">http://factfinder.census.gov/servlet/BasicFactsTable?lang=en&vt\_name=DEC\_2000\_SF\_3\_U\_DP3&geo\_id=05000US47155>">http://factfinder.census.gov/servlet/BasicFactsTable?lang=en&vt\_name=DEC\_2000\_SF\_3\_U\_DP3&geo\_id=05000US47155>">http://factfinder.census.gov/servlet/BasicFactsTable?lang=en&vt\_name=DEC\_2000\_SF\_3\_U\_DP3&geo\_id=05000US47155>">http://factfinder.census.gov/servlet/BasicFactsTable?lang=en&vt\_name=DEC\_2000\_SF\_3\_U\_DP3&geo\_id=05000US47155>">http://factfinder.census.gov/servlet/BasicFactsTable?lang=en&vt\_name=DEC\_2000\_SF\_3\_U\_DP3&geo\_id=05000US47155>">http://factfinder.census.gov/servlet/BasicFactsTable?lang=en&vt\_name=DEC\_2000\_SF\_3\_U\_DP3&geo\_id=05000US47155>">http://factfinder.census.gov/servlet/BasicFactsTable?lang=en&vt\_name=DEC\_2000\_SF\_3\_U\_DP3&geo\_id=05000US47155>">http://factfinder.census.gov/servlet/BasicFactsTable?lang=en&vt\_name=DEC\_2000\_SF\_3\_U\_DP3&geo\_id=05000US47155>">http://factfinder.census.gov/servlet/BasicFactsTable?lang=en&vt\_name=DEC\_2000\_SF\_3\_U\_DP3&geo\_id=05000US47155>">http://factfinder.census.gov/servlet/BasicFactsTable?lang=en&vt\_name=DEC\_2000\_SF\_3\_U\_DP3&geo\_id=05000US47155>">http://factfinder.census.gov/servlet/BasicFactsTable?lang=en&vt\_name=DEC\_2000\_SF\_3\_U\_DP3&geo\_id=05000US47155>">http://factfinder.census.gov/servlet/BasicFactsTable?lang=en&vt\_name=DEC\_2000\_SF\_3\_U\_DP3&geo\_id=05000US47155>">http://factfinder.census.gov/servlet/BasicFactsTable?lang=en&vt\_name=DEC\_2000\_SF\_3\_U\_DP3&geo\_id=05000US47155>">http://factfinder.census.gov/servlet/BasicFactsTable?lang=en&vt\_name=DEC\_2000\_SF\_3\_U\_DP3&geo\_id=05000US47155>">http://factfinder.census.gov/servlet/BasicFactsTable?lang=en&vt\_name=DEC\_2000\_SF\_3
- 2000b Information extracted from "State and County Quick Facts for Sevier County, Tennessee." Available on the Internet at <a href="http://quickfacts.census.gov/qfd/states/47/47155.html">http://quickfacts.census.gov/qfd/states/47/47155.html</a>>.
- 2000 Information extracted from "DP-1. Profile of General Demographic Characteristics: 2000. Geographic Area: Pigeon Forge City, Tennessee. Available on the Internet at <a href="http://censtats.census.gov/data/TN/1604758080.pdf">http://censtats.census.gov/data/TN/1604758080.pdf</a>>.
- U.S. Department of Agriculture, Forest Service
  - 2002 Biological Assessment of the Huron-Manistee National Forests. Cadillac, MI: Huron-Manistee National Forests.
  - 2004a *Trees of Western North Carolina: Eastern Hemlock*. Available on the Internet at <a href="http://www.wildwnc.org/trees/Tsuga\_canadensis.html">http://www.wildwnc.org/trees/Tsuga\_canadensis.html</a>>.
  - 2004b Information extracted from Fire Effects Information System database, species information for *Melanthium latifolium*. Available on the Internet at <a href="http://www.fs.fed.us/database/feis/plants/forb/mellat/botanical\_and\_ecological\_characteris\_tics.html">http://www.fs.fed.us/database/feis/plants/forb/mellat/botanical\_and\_ecological\_characteris\_tics.html</a>>.
  - 2004c "Pieris floribunda (Pursh) Benth. and Hook, mountain andromeda." Woody Plant Seed Manual. Available on the Internet at <a href="http://wpsm.net/Pieris.pdf">http://wpsm.net/Pieris.pdf</a>>.
- U.S. Department of Agriculture, Forest Service; U.S. Environmental Protection Agency; U.S. Department of the Interior, Fish and Wildlife Service; and Tennessee Valley Authority.
  - 2002 Southern Forest Resource Assessment. ///Parsons note: need to complete this citation, which was used in Section 3.2.2.2.
- U.S. Department of the Interior (DOI)
  - 1932 Final Report of the Southern Appalachian National Park Commission to the Secretary of Interior, June 30, 1931, Washington DC.
- U.S. Department of the Interior, Fish and Wildlife Service
  - "Species Account: Carolina Northern Flying Squirrel." *Endangered and Threatened Species of the Southeastern United States* (The Red Book). Region 4. Available on the Internet at <a href="http://cookeville.fws.gov/docs/endspec/sqrlsa.html">http://cookeville.fws.gov/docs/endspec/sqrlsa.html</a>>.
  - "Species Account: Snail Darter." *Endangered and Threatened Species of the Southeastern United States* (The Red Book). Region 4. Available on the Internet at <a href="http://cookeville.fws.gov/docs/endspec/snldtrsa.html">http://cookeville.fws.gov/docs/endspec/snldtrsa.html</a>>.
  - "Endangered and Threatened Species; Bald Eagle Reclassification; Final Rule." *Federal Register* July 12, 1995. Volume 60(133): 36000-36010. Available on the Internet at <a href="http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=1995\_register&docid=fr12jy95-18.pdf">http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=1995\_register&docid=fr12jy95-18.pdf</a>.

- 2003 "Endangered Species Facts: Orange-footed Pearly Mussel (*Plethobasus cooperianus*)." Available on the Internet at <a href="http://midwest.fws.gov/Endangered/clams/orang-fc.html">http://midwest.fws.gov/Endangered/clams/orang-fc.html</a>>.
- 2004 Fax from Jim Widlak, U.S. Fish and Wildlife Service, to Rose Chmielewski, T.N. & Associates, Inc. on September 17, 2004 concerning "Species of Concern" in Great Smoky Mountains National Park.
- U.S. Environmental Protection Agency
  - 2003 Information extracted from "Finding Answers. National Environmental Policy Act." Available on the Internet at <a href="http://www.epa.gov/region5/defs/html/nepa.htm">http://www.epa.gov/region5/defs/html/nepa.htm</a>>.
- U.S. Geological Survey
  - 2003a Research on Decline of Eastern Hemlock (Tsuga canadensis) at the Aquatic Ecology Laboratory. Kearneysville, WV: U.S. Department of the Interior; Revised November 24, 2003. Available on the Internet at <www.lsc.usgs.gov/aeb/2048-03>.
  - 2003b. Current Lake Sturgeon Work and Issues. Lake Sturgeon fact sheet. From Great Lakes Lake Sturgeon web site (U.S. Fish and Wildlife Service). Available online at: http://www.glsc.usgs.gov/research/fisheriesresearch.asp?ID=8
  - 2004. North Dakota's Federally Listed Endangered Threatened and Candidate Species 1995, Blue Sucker (*Cycleptus elongaus*). Northern Prairie Wildlife Research Center. Web page (accessed January 12, 2004) available online at: <a href="http://www.npwrc.usgs.gov/resource/distr/others/nddanger/species/cyclelon.htm">http://www.npwrc.usgs.gov/resource/distr/others/nddanger/species/cyclelon.htm</a>

## University of Michigan

1995-2003 "Corvus corax, Common Raven." Animal Diversity Web, University of Michigan Zoology Museum. Available on the Internet at <a href="http://animaldiversity.ummz.umich.edu/site/accounts/information/Corvus\_corax.html">http://animaldiversity.ummz.umich.edu/site/accounts/information/Corvus\_corax.html</a>.

#### Webb, P.A.

- 2002 Cultural and Historical Resource Investigations of the Ravensford Land Exchange Tract, Great Smoky Mountains National Park, Swain County, North Carolina. Durham, NC: TRC Garrow Associates, Inc.
- 2004 Cultural Resources Existing Conditions Report, North Shore Road Environmental Impact Statement, Swain and Graham Counties, North Carolina. Durham, NC: TRC Garrow Associates. Submitted to the National Park Service.

# Webb, P.A. and T. Benyshek

2004 Archaeological Investigations in the Elmont Historic District, Great Smoky Mountains National Park, Sevier County, Tennessee. Durham, NC: TRC Garrow Associates, Inc.

## Weals, V.

- 1993 Last Train to Elkmont. Knoxville, TN: Olden Press.
- Welch, R., M. Madden, and T. Jordan
  - 2002 "Photogrammetric and GIS Techniques for the Development of Vegetation Databases of Mountainous Areas: Great Smoky Mountains National Park." ISPRS Journal of Photogrammetry & Remote Sensing 57 (2002) 53-68.
- White, R.D., K.D. Patterson, A. Weakley, C.J. Ulrey and J. Drake

2003 *Vegetation Classification of Great Smoky Mountains National Park.* Durham, NC: Unpublished report submitted to BRD-NPS Vegetation Mapping Program. NatureServe.

#### Williams, Tara Y.

1990 *Botrychium matricariaefolium*. Fire Effects Information System database, U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory. Available on the Internet at < http://www.fs.fed.us/database/feis/>.

## Wisconsin Department of Natural Resources

Information extracted from "Peregrine Falcon (*Falco peregrinus*)." Available on the Internet at <a href="http://www.dnr.state.wi.us/org/land/er/factsheets/birds/Falcon.htm">http://www.dnr.state.wi.us/org/land/er/factsheets/birds/Falcon.htm</a>>.

## Wofford, B.E. and E.W. Chester

2002 Guide to the Trees Shrubs and Woody Vines of Tennessee. Knoxville, TN: University of Tennessee Press.

## Yost, E.C., K.S. Johnson, and W.F. Blozan

1994 *Old Growth Project: Stand Delineation and Disturbance Rating*. Gatlinburg, TN: National Park Service, Great Smoky Mountains National Park, Technical Report NPS/SERGS/NATR.

## Yu, P.L.

2001 Memorandum to Superintendent: Report on Archaeological Investigations of the Elkmont Area.

On file at Great Smoky Mountains National Park.

## PREPARERS AND CONSULTANTS

NPS Great Smoky Mountains National Park

Primary Project Team

Shawn Benge, Chief of Maintenance

David Chapman, Historian

Cathy Cook, Chief of Resource Education

Joel Ossoff, Concessions Management Specialist

Janet Rock, Botanist

Ian Shanklin, Landscape Architect

Primary Contacts and Resource Specialists

Kent Cave, Branch Chief, Interpretive Media

Nancy Finley, Chief of Resource Management and

Science

Dan Hand, Supervisory Ranger, Resource Education

Larry Hartmann, Chief of Resource Management and

Science

Mike Jenkins, Ecologist

Kris Johnson, Vegetation Specialist

Erik Kreusch, Archeologist

Keith Langdon, Supervisory Biologist and Inventory

and Monitoring Coordinator

Lance Lewis, Safety Manager

Donna Lossen, Chief of Administration

Jerry McGee, Cultural Landscape Architect

Sue McGill, Chief of Maintenance

Bob Miller, Public Affairs Officer

Steve Moore, Supervisory Fishery Biologist

Becky Nichols, Entomologist

Jim Northup, Chief Ranger

Chiara Palazzolo, Landscape Architect

Scott Pardue, Supervisory Park Ranger, Resource

Education

Terry Saunders, Assistant Chief of Maintenance

Bob Shubert, Historic Preservation Supervisor

Chris Stein, Chief of Resource Education

Bob Wightman, Park Ranger, Ranger Activities

NPS Southeast Regional Office

Bob Blythe, Historian

Jami Hammond, Planning and Compliance

Dan Scheidt, Chief of Cultural Resources

Rich Sussman, Chief of Planning

Amy Wirsching, Planning and Compliance

**NPS Denver Service Center** 

Greg Cody, Cultural Resource Compliance Technical

Specialist

Margaret DeLaura, Community Planner

Ruth Eitel, Visual Information Specialist

Christy Fischer, Writer and Editor

Barbara J. Johnson, Branch Chief for Planning

David Kreger, Natural Resource Compliance

Specialist

Merritt Malin, Landscape Architect and GIS Analyst

Linda Ray, Branch Chief for Planning and

Communications

Matthew Safford, Outdoor Recreation Planner and

GIS Analyst

Ian Shanklin, Landscape Architect

Terri Urbanowski, Landscape Architect

Ann Van Huizen, Outdoor Recreation Planner

Steve Whissen, Cultural Resource Specialist

Lori Yokomizo, Information Technology Specialist

TN & Associates, Inc.

Shelley Boehm, Information Specialist

Perry Childress, Historic Structures Specialist

Rose Chmielewski, Ecologist

Barbara Eisenberg, Wildlife Biologist

Jennifer Hendicks, Information Specialist

Scott Horzen, Botanist and Wetland Ecologist

Jackie Little, Ecologist

Peter Schoephoester, Hydrogeologist and GIS Specialist

Michael Wikauskis, GIS/CADD Specialist

## TRC Garrow Associates, Inc.

Tasha Benyshek, Field Archaeologist Todd Cleveland, Preservation Planner Barbara Garrow, Environmental Planner Paul Webb, Achaeologist

## **McGill Associates**

Randy Hintz, PE, Project Engineering Manager Gary, McGill, President

# Lodging Resources, Inc.

David Caples, Lodging Analyst Helen Cook, Lodging Analyst

## **Parsons**

Jan Snyder, Writer/Editor

#### **ACRONYMS AND ABBREVIATIONS**

ADT average daily traffic APE area of potential effect

ARPA Archaeological Resources Protection Act

ASMIS Archaeological Sites Management Information System

BOD biological oxygen demand CCC Civilian Conservation Corps

CEQ Council on Environmental Quality

cmbs centimeters below surface dbh diameter at breast height DOI Department of the Interior

DEIS Draft Environmental Impact Statement

District Elkmont Historic District EA Environmental Assessment

EF emission factor

EPA Environmental Protection Agency
EPC Elkmont Preservation Committee
FEIS Final Environmental Impact Statement
FEMA Federal Emergency Management Agency

FHBM Flood Hazard Boundary Maps
FHWA Federal Highway Administration
FIRM Flood Insurance Rate Maps
FONSI Finding of No Significant Impact

ft feet ft<sup>3</sup> cubic feet gpd gallons per day

HBN Hydrologic Benchmark Data Network

HI human influence I/I inflow and infiltration

km kilometers lf lineal feet LOS level of service

 $\begin{array}{cc} m & meters \\ m^3 & cubic \ meters \end{array}$ 

mi miles

MAL montane alluvial forest NAC noise abatement criteria

NADP National Atmosphere Deposition Program

NIS non-indigenous species

NEPA National Environmental Policy Act NFPA National Fire Protection Association NHPA National Historic Preservation Act

NPS National Park Service

NRHP National Register of Historic Places

O & M operation and maintenance

ONRW Outstanding National Resource Waters
Park Great Smoky Mountains National Park

ppb parts per billion

ptsf percent time spent following

ROD Record of Decision RV recreational vehicle

s seconds

SCESSevier County Electric SystemSEACSoutheast Archaeological CenterSHPOState Historic Preservation Officer

T & E threatened and endangered

TDEC Tennessee Department of Environmental Conservation

TDOA Tennessee Division of Archaeology
THC Tennessee Historical Commission

TN Tennessee

TNC The Nature Conservancy TNM traffic noise model

tpd tons per day

TWRA Tennessee Wildlife Resources Agency
USDI United States Department of the Interior

USGS United States Geological Survey
UTM Universal Transverse Mercator
VMT number of vehicles times distance

vph vehicles per hour

VWM volume-weighted mean

WPC Water Pollution Control (Division of TDEC)

YOY young-of-year

#### **GLOSSARY**

Adverse (Section 106 usage): alteration, either direct or indirect, to the characteristics of a historic property qualifying it for inclusion in or eligibility for the National Register of Historic Places, in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association.

Affected environment: a description of the existing environment to be affected by the proposed action (40 CFR 1502.15).

Alternative: a reasonable method of addressing the problem identified or satisfying the stated need (40 CFR 1502.4).

Best Management Practices: practices developed by the State of Tennessee (and all other states) to meet the objectives of the Clean Water Act. These objectives include "to restore and maintain the chemical, physical and biological integrity of the Nation's waters". The State has developed practical non-regulatory guidelines to minimize the impact of land management activities on the environment. The guidelines provide practical methods to use in the field to eliminate or minimize the potential for sedimentation, contamination, and eutrophication (nutrient loading) of surface waters.

**Building:** a house, barn, hotel, or similar construction, created principally to shelter any form of human activity. "Building" may also be used to refer to a historically and functionally related unit, such as a house and garage.

Contributing: refers to a resource that adds to the historic associations, historic architectural qualities, or archeological values for which a property is significant because I) it was present during the period of significance, relates to the documented significance of the property, and possesses historic integrity or is capable of yielding important information about the period; or 2) it independently meets the National Register criteria.

Council on Environmental Quality (CEQ): established under Title II of NEPA to develop Federal agency-wide policy and regulations for implementing the procedural provisions of NEPA, resolve interagency disagreements concerning proposed major Federal actions, and to ensure that Federal agency programs and procedures are in compliance with NEPA.

**Cultural landscape:** a geographic area, including both cultural and natural resources and the wildlife or domestic animals therein, associated with a historic event, activity, or person or exhibiting other cultural or aesthetic values.

**Cumulative effect:** the incremental environmental impact or effect of the proposed action, together with impacts of past, present and reasonably foreseeable future actions, regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time (40 CFR 1508.7).

**District:** a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development.

Effect (Section 106 usage): alteration to the characteristics of a historic property qualifying it for inclusion in or eligibility for the National Register of Historic Places.

Environmental consequences: environmental effects of project alternatives, including the proposed action, any adverse environmental effects which cannot be avoided, the relationship between short-term uses of the human environment, and any irreversible or irretrievable commitments of resources that would be involved if the proposal should be implemented (40 CFR 1502.16).

Environmental Impact Statement (EIS): a detailed written statement required by section Io2(2)(C) of NEPA, analyzing the environmental impacts of a proposed action, adverse effects of the project that cannot be avoided, alternative courses of action, short-term uses of the environment versus the maintenance and enhancement of long-term productivity, and any irreversible or irretrievable commitment of resources (40 CFR 1508.1).

Environmental Assessment (EA): a concise public document, prepared in compliance with NEPA, that briefly discusses the purpose and need for an action, alternatives to such action, and provides sufficient evidence and analysis of impacts to determine whether to prepare an environmental impact statement or finding of no significant impact (40 CFR 1508.9).

Finding of No Significant Impact (FONSI): a document prepared in compliance with NEPA, supported by an environmental assessment, that analyzes whether a Federal action will have no significant impact on the human environment and for which an environmental impact statement, therefore, will not be prepared (40 CFR 1508.13).

Historic: refers to a resource that is 50 years of age or older.

**Impact (Effect):** a direct result of an action which occurs at the same time and place; or an indirect result of an action which occurs later in time or in a different place and is reasonably foreseeable; or the cumulative results from the incremental impact of the action when added to

other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions (40 CFR 1508.8).

**Information potential (archeology):** the ability to provide data relevant to one or more important research questions.

**Integrity** (archeology): the presence of artifacts and deposits in their original (or slightly modified) depositional context.

**Locus/loci** (archeology): a distinct area(s) within an archeological site in Elkmont Historic District that has been surveyed and found to contain cultural deposits relating to one or more prehistoric American Indian or historic period occupations.

**Mitigation:** planning actions taken to avoid an impact altogether, to minimize the degree or magnitude of the impact, reduce the impact over time, rectify the impact, or compensate for the impact (40 CFR 1508.20).

**National Register of Historic Places:** the official Federal list of districts, sites, buildings, structures, and objects significant in American history, architecture, archeology, engineering, and culture.

Noncontributing: refers to a resource that does not add to the historic architectural qualities, historic associations, or archeological values for which a property is significant because I) it was not present during the period of significance or does not relate to the documented significance of the property; 2) due to alterations, disturbances, additions, or other changes, it no longer possesses historic integrity or is capable of yielding important information about the period; or 3) it does not independently meet the National Register criteria.

**Notice of Intent:** a notice that an environmental impact statement will be prepared and considered (40 CFR 1508.22).

**Preservation:** the act or process of applying measures necessary to sustain the existing form, integrity, and materials of a historic property. Work, including preliminary measures to protect and stabilize the property, generally focuses upon the ongoing maintenance and repair of historic materials and features rather than extensive replacement and new construction.

**Reconstruction:** the act or process of depicting, by means of new construction, the form, features, and detailing of a non-surviving site, landscape, building, structure, or object for the purpose of replicating its appearance at a specific period of time and in its historic location.

Record of Decision (ROD): a concise public record of decision prepared by the Federal agency, pursuant to NEPA that contains a statement of the decision, identification of all alternatives considered, identification of the environmentally preferred alternative, a statement as to whether all practical means to avoid or minimize environmental harm from the alternative selected have been adopted (and, if not, why they were not), and a summary of monitoring and enforcement for any mitigation (40 CFR 1505.2).

**Regeneration; Natural regeneration:** a natural supplement to active restoration; plant growth originating from seeds in the soil seed bank within disturbed sites and also from adjacent native seed sources.

**Rehabilitation (cultural resources):** the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features that convey its historical, cultural, or architectural values.

**Restoration (cultural resources):** the act or process of accurately depicting the form, features, and character of a property as it appeared at a particular period of time by means of the removal of features from other periods in its history and reconstruction of missing features from the restoration period.

**Restoration** (vegetation): the active planting of native plants in an effort to reestablish the closest semblance of the original plant communities.

**Revegetation:** any type of planting regardless of the species origin (could include plants not native to the immediate area or nonnative species). Revegetation of this type will not be conducted in Elkmont Historic District.

**Section 106:** Refers to Section 106 of the National Historic Preservation Act of 1966, which requires federal agencies to take into account the effects of their proposed undertakings on properties included or eligible for inclusion in the National Register of Historic Places and give the Advisory Council on Historic Preservation a reasonable opportunity to comment on the proposed undertakings.

Site (archeology): in Elkmont Historic District, a section that has been defined for management concerns, and which is bounded by topographic or cultural features. Each site may contain a number of distinct archeological loci.

**Structure:** to distinguish from buildings, this term is used for those functional constructions made usually for purposes other than creating human shelter. Examples of structures include bridges, dams and gazebos.

**Tiering:** the coverage of general matters in broader environmental impact statements with subsequent narrower statements of environmental analysis, incorporating by reference, the general discussions and concentrating on specific issues (40 CFR 1508.28).

**Unsurveyed area** (archeology): a part of the Elkmont Historic District that has not been systematically surveyed for archeological resources.

# **INDEX**

Air quality
American Indians
Appalachian Club
Appalachian Clubhouse
Appalachian Mountains
Area of Potential Effect (APE)
Campers
Campground
Chapman Cabin
Consultation
Endangered species (see threatened and endangered species)
Environmental justice
Erosion
Ethnographic resources
Exotic Plants
Floodplains
Hiking
Historical Significance
Interpretation
Invasive Species
Leases
Little River
Little River Lumber Company
Little River Railroad Company
Montane Alluvial Forest
National Environmental Policy Act
National Historic Preservation Act
National Register of Historic Places
Native Americans (see American Indians)
NPS Operations
Orientation
Outstanding National Resource Water

Parking Period of Significance Secretary of the Interior's Standards Section 106 Soils Spence Cabin Threatened and Endangered Species Traffic Trails Vegetation Vegetation Classification System Vehicles Viewshed Visitor experience Visitors with disabilities Wastewater Water quality Wetlands Wildlife Wonderland Club Wonderland Hotel



As the nation's principal conservation agency, the Department of the Interior has the responsibility for most of our nationally owned public lands and natural resources. This includes fostering sound use of our land and water resources; protecting our fish, wildlife, and biological diversity; preserving the environmental and cultural values of our national parks and historical places; and providing for the enjoyment of life through outdoor recreation. The department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people by encouraging stewardship and citizen participation in their care. The department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

NPS D-628 Volume 2 / February 2009 / Printed on recycled paper



# Elkmont Historic District

Final Environmental Impact Statement and General Management Plan Amendment

Volume 2