INTRODUCTION

Natural Falls State Park, formerly known as Dripping Springs is located in northeast Oklahoma. The Park’s natural beauty and flora have attracted visitors since 1907. Botanists such as Harriet Barclay, Charles Wallis, Edgar Wherry and several others have taken a special interest in the park because of its interesting flora, especially the ferns. In the 1980’s the privately owned park was closed due to the poor condition of the buildings on the property (1). In 1990 Dripping Springs was purchased by the Oklahoma Tourism and Recreation Department with plans to make it once again accessible to the public (2).

In a 1988 visit to the Oklahoma State University Herbarium I noticed that several herbarium sheets of ferns were collected from Dripping Springs. This was intriguing and made me want to visit the area. In July 1989, while on vacation in northeast Oklahoma my family and I visited the park only to find that it had closed. In 1998 I learned through a fellow botanist that the area was once again open to the public. Due to my interest in floristics and taxonomy, Natural Falls State Park seemed to be the perfect place to create a checklist of ferns. Thus, the objective of this study was to create an inventory of the ferns of Dripping Springs by using my collection and the collections and observations from earlier botanists.
INVENTORY OF FERNS

A systematic collection of the ferns of Dripping Springs was conducted on August 7, 1998 and October 20, 2001. Collecting focused on the ferns that grew in the ravine floor and rock surfaces. Using standard taxonomic methods, each plant was identified to species and subsequently inventoried. Specimens typically were collected in fertile condition with the exception of Botrychium virginianum. Nomenclature for the taxa follows Flora of North America (6). Vouchers will be deposited in the Oklahoma State University Herbarium (OKLA).

FLORA OF NATURAL FALLS STATE PARK (DRIPPING SPRINGS)

In three days of collecting, 17 species from 6 families and 12 genera were encountered (Table 1). Fern collections and recordings from 1925-1977 are listed in Tables 2 and 3. From 1925-2001 a total of 19 species from 6 families and 12 genera have been reported to occur. Ferns designated as rare by the Oklahoma Natural Heritage Inventory (7) were Asplenium bradleyi (S1).

ACKNOWLEDGEMENTS

A special thanks to the staff at Natural Falls State Park and Tom Crider for allowing me to have this opportunity. I hope the checklist will be useful. I also thank Dr. Ron Tyrl for his advice on this study. Finally I want to thank the McLoud High school Botany Class for accompanying me on the October 20, 2001 field trip.

REFERENCES

TABLE 1. CHECKLIST OF FERNS, NATURAL FALLS STATE PARK (DRIPPING SPRINGS)  
Collected by Bruce Smith August 7, 1998 and October 15, 1998, and October 20, 2001

**ASPLENIACEAE**

*Asplenium bradleyi* D.C. Eaton.  
Bradley’s Spleenwort, August 7, 1998  
3590 (OKLA)

*Asplenium platyneuron* (L.) Britton, Sterns, & Poggenb.  
Ebony Spleenwort, 3578 (OKLA)

*Asplenium rhizophyllum* L.  
Walking Fern 3562 (OKLA)

*Asplenium trichomanes* L.  
Maidenhair Spleenwort 3619 (OKLA)

**DRYOPTERIDACEAE**

*Cystopteris bulbifera* (L.) Bernh.  
Bulblet Bladder Fern 3589 (OKLA)

*Cystopteris tennesseensis* Shaver  
Tenessee Bldder Fern 3573 (OKLA)

*Dryopteris marginalis* (L.) A. Gray  
Marginal Shield Fern 3568 (OKLA)

*Onoclea sensibilis* L.  
Sensitive Fern 3574 (OKLA)

*Polystichum acrostichoides* (Michx.) Schott.  
Christmas Fern 3580 (OKLA)

*Woodsia obtusa* (Spreng.) Torr.  
Blunt Lobed Woodsia 3622 (OKLA)

**OPHIOGLOSSACEAE**

*Botrychium virginianum* (L.) Sw.  
Rattlesnake Fern 3773 (OKLA)

**POLYPODIACEAE**

*Pleopeltis ptepodioides* (E.G. Andrews & Windham  
Resurrection Fern 3772 (OKLA)

**PTERIDACEAE**

*Adiantum capillus-veneris* L.  
Southern Maidenhair Fern 3565 (OKLA)

*Adiantum pedatum* L. Northern Maidenhair Fern 3576 (OKLA)

*Cheilanthes lanosa* (Michx) D.C. Eaton.  
Hairy Lip Fern 3584 (OKLA)

*Pellaea atropurpurea* (L.) Link  
Purple Cliff Brake Fern 3582 (OKLA)

**THELYPTERIDACEAE**

*Phegopteris hexagonoptera* (Michx.) Fee  
Beech Fern 3571 (OKLA)

TABLE 2. CHECKLIST OF FERNS NATURAL FALLS STATE PARK (DRIPPING SPRINGS)  
Reported by John K. Small and Edgar T. Wherry May 3, 1925 (4)

**ASPLENIACEAE**

*Asplenium bradleyi* D.C. Eat.  
Bradley’s Spleenwort

*Asplenium platyneuron* (L.) Britton, Sterns, & Poggenb.  
Ebony Spleenwort

*Asplenium resiliens* Kunze  
Little Ebony Spleenwort

*Asplenium rhizophyllum* L.  
Walking Fern

*Asplenium trichomanes* L.  
Maidenhair Spleenwort

**DRYOPTERIDACEAE**

*Cystopteris bulbifera* (L.) Bernh.  
Bulblet Bladder Fern

*Cystopteris fragilis* (L.) Bernh.  
Brittle Fern

*Dryopteris marginalis* (L.) A. Gray  
Marginal Shield Fern

*Polystichum acrostichoides* (Michx.) Schott.  
Christmas Fern

**PTERIDACEAE**

*Adiantum capillus-veneris* L.  
Southern Maidenhair Fern

*Cheilanthes lanosa* (Michx.) D.C.Eaton  
Hairy Lip Fern

Smith, B.A.
### TABLE 3. CHECKLIST OF FERNS NATURAL FALLS STATE PARK (DRIPPING SPRINGS)
Collected from 1928-1977

**ASPLENIACEAE**

*Asplenium platyneuron* (L.) Britton, Sterns & Poggenb. June 30, 1957 Charles Wallis 4454 (OKLA)

*Asplenium rhizophyllum* L.
- May 4, 1928 Robert Stratton 798 (OKLA)
- July 17, 1929 Robert Stratton (OKLA)
- July 7, 1950 U.T. Waterfall 9571 (OKLA)
- June 30, 1957 Charles Wallis 4456 (OKLA)
- June 16, 1972 John and Connie Taylor 10792 (OKLA)

*Asplenium trichomanes* L.
- May 7, 1938 Milton Hopkins 3250 (OKLA)
- July 7, 1950 U.T. Waterfall 9561 (OKLA)

**DRYOPTERIDACEAE**

*Cystopteris bulbifera* (L.) Bernh.
- June 30, 1957 Charles Wallis 4449 (OKLA)

*Cystopteris tennesseensis* Shaver
- July 7, 1950 U.T. Waterfall 9569 (OKLA)
- June 16, 1972 John and Connie Taylor 10791 (OKLA)

*Dryopteris marginalis* (L.) A. Gray
- May 4, 1928 T.A. Tripp 137 (OKLA)
- May 7, 1938 Milton Hopkins 3235 (OKLA)
- June 16, 1972 John & Connie Taylor 10794 (OKLA)
- September 4, 1977 T.A. Zanoni 3349 (OKLA)

*Polystichum acrostichoides* (Michx.) Schott
- June 30, 1957 Charles Wallis 4451 (OKLA)

*Woodsia obtusa* (Spreng.) Torr.
- July 16, 1929 Robert Stratton 1722 (OKLA)
- July 8, 1957 Charles Wallis 4724 (OKLA)

**POLYPODIACEAE**

*Pleopeltis polypodioides* (L.) E.G. Andrews & Windham
- June 30, 1957 Charles Wallis 4455 (OKLA)

**OPHIOGLOSSACEAE**

*Botrychium virginianum* (L.) Sw.
- April 28, 1957 Charles Wallis 3660 (OKLA)

**PTERIDACEAE**

*Adiantum capillus-verneris* L.
- June 2, 1963 Charles Wallis 8760 (OKLA)
- July 7, 1950 U.T. Waterfall 9570 (OKLA)
- June 16, 1972 John and Connie Taylor 10788 (OKLA)

*Adiantum pedatum* L.
- May 4, 1928 Robert Stratton 804 (OKLA)
- May 7, 1938 Milton Hopkins 3254 (OKLA)

*Cheilanthes lanosa* (Michx.) D.C. Eaton
- August 11, 1932 Featherly and Still (OKLA)
- May 7, 1938 Milton Hopkins 3251 (OKLA)

*Pellaea atropurpurea* (L.) Link
- July 7, 1950 U.T. Waterfall 9560 (OKLA)

**THELYPTERIDACEAE**

*Phegopteris hexagonoptera* (Michx.) Fee
- July 18, 1929 Robert Stratton (OKLA)