The History of a

Proposed Indoor Training Facility and Stadium Woods

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Description of Stadium Woods

Stadium Woods is an approximately an 11.3 acre wooded section found adjacent to the east side of Lane Stadium on the Virginia Tech campus. It is approximately a rectangle 2000 feet long (running north/south) and 300 feet wide (Figure 1). The 11.3 acre estimate (with a precision of 1/563) is based on a ground survey of the area which includes forest floor and understory and was conducted by Dr. Mike Aust (a forest survey expert at Virginia Tech) and John Seiler. This ground based survey excluded any area that is mowed regularly. An estimate of 15 acres has been widely reported and this area is an estimate from above the tree canopy using aerial imagery and includes overhanging tree canopy and area on the east side of the woods which is mowed regularly.

The area is heavily wooded, with numerous white oak (*Quercus alba* L.) trees over 36 inches in diameter at breast height (dbh). The age structure of the area is an unbalanced, uneven-aged stand with a large amount of coarse woody debris and standing snags indicative of oldgrowth forest (Figure 2 and 3) (Oliver and Larson , 1996). There are approximately 450 trees per acre over 4 inches in dbh. Each acre contains three to five white oak trees likely over 250 years old, and these large trees make up a



Figure 1. Stadium Woods outlined in red on the Virginia Tech campus, Blacksburg, Virginia

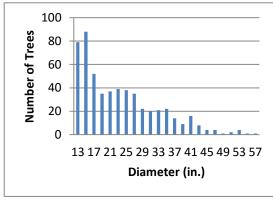


Figure 2. Diameter distibution of trees greater than 11 inches in Stadium Woods. The distribution found is indicative of an uneven-aged old growth stand.

significant percentage of the overstory. In all of Stadium Woods, there are 58 white oaks over 3 feet in dbh (two are large standing dead snags). The mid-story and gaps in the old white oak canopy are composed primarily of rapidly growing black oak (*Quercus velutina* lam.), black cherry (*Prunus serotina Ehrh.*), sweet cherry (*Prunus avium L.*), and red maple (*Acer rubrum L.*). The understory is composed of

blackhaw (*Viburnum prunifolium* L.), sassafras (*Sassafras albidum* (Nutt.) Ness.), serviceberry (*Amelanchier arborea* Michx f.) Fern.), choke cherry (*Prunus virginiana* L.), blackgum (*Nyssa sylvatica* (Marsh.)), and flowering dogwood (*Cornus florida* L.). There is also a significant amount of invasive species in the understory, including privet (*Ligustrum* spp.), oriental bittersweet (*Celastrus orbiculatus*

Thunb.), and multiflora rose (Rosa multiflora Thunb. Ex Murr.). Simpson Index of tree species diversity range from over 0.9 (very high diversity) to 0.4 (low diversity) depending on the location in Stadium Woods. Over 80 species of birds have been documented frequenting Stadium Woods, including many neotropical bird species (survey conducted by New River Valley Bird Club).







Confirmation of White Oak Ages

Scattered throughout Stadium Woods, The Grove, in front of the Vet School, and other parts of campus are large numbers of white oak trees over 3 feet in diameter.

These trees are remnant trees left from many previous disturbances that have taken place in and around the campus. Other tree species of this size are rarely found, and when they exist, they are in generally very poor health (e.g., large black oak on north side of Southgate Drive across from dairy barns). This is because in the eastern U.S., white oak can live longer and reach a greater size (5 feet in diameter and 100 feet tall) than most other species. White oak is known to live over 600 years (DeWitt and Derby 1955); therefore, remnant very large trees are typically white oak. The data base of old trees known as the "OLDLIST" maintained by dendrochronologist and ecologist Dr. Neil Pederson lists a white oak of 464 years in Buena Vista, Virginia (http://www.ldeo.columbia.edu/~adk/oldlisteast/). Of

Figure 3. Views of Stadium Woods. Upper right photo shows Virginia Master Naturalists at work inventorying the forest.

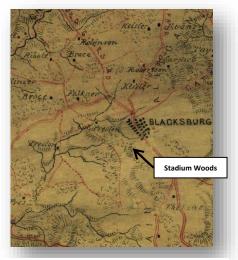


Figure 4. Stadium Woods shown on 1864 Confederate map of Blacksburg, Va area. From surveys and reconnaissance's by Liut. [sic] C.S. Dwight Engr. Corps P.A. made under direction of Capt. A.H. Campbell Engr. Corps P.A.C.S. Confederate States of America. Army. Dept. of Northern Virginia. Chief Engineer's Office. 1864

particular interest to Stadium Woods is a 1864 Confederate Civil War map for Montgomery County, Virginia (Figure 4). In the immediate Blacksburg, Virginia area are two homes labeled as Col. Preston (now known as Solitude) and Preston (now known as Smithfield Plantation) orienting off these homes and the town of Blacksburg shows a patch of woods on a hill which we now call Stadium Woods.

Most of the large white oaks on the Virginia Tech campus are in the same cohort and are roughly the same age. Several trees in The Grove that have died and are of similar size to those found in Stadium Woods had ring counts over 330 years. One tree aged by Dr. Jeff Kirwan in Stadium Woods was estimated at 305 years. His count was carefully conducted using a magnifying glass and razor blade to clean wood. The tree was hollow, so an extrapolation was utilized to estimate the total age.

On January 6, 2012, Drs. John Seiler and Jay Sullivan, used an increment borer to take cores from three 40-inch dbh trees in Stadium Woods. The trees are on the immediate footprint of the planned practice facility. Because of their large size, we were still not able to reach the center of the trees. Tree number 101 in which the first 13.75 inches of radius was obtained (6.25 inches from center where we hit rot) was dated back to 1773, when the tree at that time was 12.5 inches in diameter (Appendix 1). Extrapolating the average growth rate over the 238-year-old core to the center of the tree estimates it to be 346 years old, meaning it may have sprouted in the year 1665. A second core from tree 101 collected on January 16, 2012 on the opposite side of the tree yielded a confirmed minimum age of 273 years. The longest core of 18 inches (very close to center) collected from tree number 65 was aged at 232 years, or back to the year 1764. The final tree number 37 dates back to 1801 or is 210 years old at a point where it is still 6.25 inches short of its center estimating it to be 309 years old. On March 9, 2012, Mr. John Kidd and John Seiler cored tree 175 (41 inch diameter) and obtained a core sample with 314 rings (no extrapolation) which means wood at the end of the core was formed in 1697. This core was still short of center by 2.5 inches yielding an extrapolated age of 358. These are not the largest trees found in Stadium Woods. Numerous individuals are over 45 inches in diameter, and five trees are over 50 inches in diameter. Further these ages are taken approximately 4.5 feet off the ground. White oaks can often take many years to reach 4.5 feet tall.

Uniqueness of Stadium Woods among Old Growth White Oak Forests in the East

Old growth forest is defined in many ways. Most descriptions include the following characteristics: a large percentage of exceptionally old trees, standing dead trees, coarse woody debris on the forest floor, multilayered canopies, a mix of tree ages, canopy gaps where large trees have fallen, and pits and mounds from the root plates of large trees falling over. Stadium Woods, including the area that would be impacted by the proposed building, has all of these features.

No one really knows how much old growth forest exists in the U.S. A 1993 inventory of the southeastern U.S. found about 425 old growth sites across the region, totaling only one-half percent of the total forest area (http://www.scientificamerican.com/article.cfm?id=are-old-growth-forests). The single best reference for old growth sites in the east is the on-line publication *Old growth in the East: A Survey (Online Ed.)* (Byrd 2006). A site highlighted in this document is a woodland found on the campus of Sweet Briar College in Amherst County, Virginia, which is described as:

"Sweetbriar College White oak Woods (Amherst County): on a flat ridge owned by the college, approximately 10 acres of White oak-mixed hardwoods-mixed herb community in which most of the dominant trees have dbhs (diameters at breast height) of 30 to 36 inches."

The trees in Sweetbriar College's woodland are considerably smaller than those found in Stadium Woods, yet they have been preserved and highlighted as a unique asset to their campus.

The majority of old growth forests in the east are in rugged terrain, which made them inaccessible to timber harvesting in the past, but also makes them inaccessible to a large portion of the viewing public in the present. This is part of the uniqueness of Stadiums Woods. A woodland caught between an expanding town and university - and overrun by a civil war - yet inexplicably left uncut, is remarkable indeed. Neil Pederson, a forest ecologist and old growth expert from the Tree Ring Laboratory, Lamont-Doherty Earth Observatory at Columbia University writes on January 25, 2012 about Stadium Woods:

"The uniqueness of this stand ... is that it is so easily accessible to so many people. Most of the old-growth forests on the list I sent to you are found in rugged or inaccessible areas. Hiking into Sipsey Wilderness in Alabama was not too easy. So, the value here is that, with good, environmentally-conscious development, those with limited mobility can get a sense of awe about what mature forests look like. This has to be a rare thing in upland areas. The only areas I am familiar with that give people with limited access to mature forests are in national parks or wetland forests (Four Holes Swamp, SC; Congaree National Park, SC; Everglades; I would bet the Okefenokee has something similar). But because many, if not most, old white oak forests near human settlement were cut, you might have a truly rare piece of property."

In comparison to other old growth white oak in the east, Stadium Woods may well be the single largest collection of old white oak. Dr. Pederson further commented:

"The best place that I just learned about that sounds similar [to Stadium Woods] might the Murphy Tract in WV. The site of yours sounds pretty unique...this sounds like a great find!"

The Murphy Tract contains only 21 white oaks over 340 years old (http://www.ldeo.columbia.edu/~adk/oldlisteast/Spp/QUAL.html). Stadium Woods with 56 trees over 36 inches in diameter may contain many more than this.

Other old growth white oak forests that are frequently mentioned in the eastern U.S. are Dysart woods in Ohio, which contains a white oak 51.6 inches in diameter (Stadium woods has 5 trees over 50 inches); Cook Forest State Park in Pennsylvania, which has a white oak listed at 44.3 inches in diameter; and Lilley Cornett Woods in Kentucky, which lists a 42 inch diameter white oak. A large number of trees in Stadium Woods fall into this size range.

The best source of information on old trees in the eastern U.S is found in the on-line Eastern OLDLIST (http://www.ldeo.columbia.edu/~adk/oldlisteast/). This list is a database of ancient trees and their ages. The purpose of the list is to identify and highlight maximum ages for species in eastern North America. The list only contains well-verified or well-documented tree ages. The 13 oldest white oak trees listed on the Eastern OLDLIST (http://www.ldeo.columbia.edu/~adk/oldlisteast/Spp/QUAL.html) range from 289 to 464 years with the average being 365 years. Many trees in stadium woods would easily fall into this list of some of the oldest white oaks in the U.S.

Lawrence Tucei, the Live Oaks Project Director for the Native Tree Society, commented on Stadium Woods January 27, 2012:

"Areas with old trees such as these should be protected. There are many White Oaks in North America in the 50 – 70 year old range but the 200-500 year old trees are extremely rare."

History of Opposition against the Building Location in Stadium Woods

At a January 20, 2011, Virginia Tech Arboretum Committee meeting, the members were informed by Matt Gart, University Landscape Architect, of the plans for a new indoor athletics practice facility. Mr. Gart informed the group that there were "alternative sites" but that "Beamer wanted it here" ("here" being the north end of Stadium Woods, Figure 5). The committee at the time was asked to please keep this confidential. Mr. Gart was informed that this was not a very good location and that considerable opposition was likely to occur. At an August 8, 2011, meeting of the Arboretum Committee, members were informed that the location in Stadium Woods was essentially



Figure 5. Proposed location of indoor practice facility in Stadium Woods as well as one alternative site mentioned in January 20, Arboretum committee meeting

"a done deal" and the committee was asked for remediation suggestions for the loss of tree canopy cover. In a *Washington Post* article published on August 7, 2011 (Appendix 2), it is very clear from Associate Director of Athletics for Internal Affairs Tom Gabbard's comments that the building of the facility in Stadium Woods was in fact "a done deal" in the minds of the Athletic Department. The article states, "Virginia Tech's new indoor facility will be located in a wooded area adjacent to the Hokies' outdoor football practice fields, just beyond the north end zone of Lane Stadium. Gabbard said part of the project will involve **removing 30 feet of elevation and moving approximately 80,000 cubic yards** of dirt from the woods" (emphasis mine; the elevation according to Hugh Latimer, University Architect, is actually 38 feet). Further, a Thursday, October 27, 2011, *Roanoke Times* article states, "Tech Associate Director of Athletics Tom Gabbard said that a planned indoor facility, which could open as soon as 2014, **will be** carved out of a hillside adjacent to Tech's football practice fields" (emphasis mine).

On November 3, 2011, the Arboretum Committee was asked by Associate Vice President for Facilities Michael J. Coleman (via Matt Gart) to provide an official position on the Stadium Woods location. On November 11, 2011, the Arboretum Committee sent their official "strongly opposes" position on the location of the facility in Stadium Woods (Appendix 3). "Friends of Stadium Woods (FSW)" began an online petition (http://www.ipetitions.com/petition/vtstadiumwoods) opposed to building the facility in Stadium Woods on or around November 19, 2011. FSW had an organizational meeting in the Blacksburg Branch of Montgomery County Libraries on November 30, 2011. At this meeting, they discussed letter writing campaigns, the petition, and other strategies to make the university aware of the value of Stadium Woods and the recommendation that the facility be built in an alternate location.

In early December, Faculty Senator Jim Kuypers began drafting a resolution supporting the protection of Stadium Woods. In response to these plans, Dr. Sherwood Wilson, Vice President for Administrative Services, sent a letter dated December 6, 2011 (Appendix 4), to all faculty senators that suggested that as part of information gathering, the university "... reached out to the university's experts on forestry management in the College of Natural Resources and Environment (CNRE) and have requested that they be included in our information gathering process." However, no forest management experts in the CNRE were ever aware of this or were asked to be part of information gathering. The letter further stated regarding the Arboretum Committee, "... the group only recently brought their concerns regarding the proposed location to our attention." However, the Arboretum Committee was not asked until November 3 for their official opinion. Earlier they had been asked to keep it quiet. On December 13, 2011, the Virginia Tech Faculty Senate voted unanimously in favor of a petition supporting the protection of Stadium Woods (Appendix 5). This resolution, among other things, emphasized that Virginia Tech has publicly committed itself to value sustainability and engage in sound environmental stewardship, that Stadium Woods is designated as an "environmental greenway," and that Stadium Woods is a living reminder of the natural history of campus and the region.

Meeting with Athletics and University Planning December 15, 2011

Dr. Paul Winistorfer, Dean of the College of Natural Resources and Environment (CNRE), arranged a meeting of individuals concerned about the building location (Drs. Jeff Kirwan, Eric Wiseman, and John Seiler) along with representatives from Athletics (Tom Gabbard) and University Planning (Hugh Latimer

and Matt Gart). The meeting was held on December 15, 2011, in the Merryman Center followed by a walk into Stadium Woods to examine the impacted area.

Hugh Latimer began the meeting with a discussion of the history of the facility planning. The original intent was to locate the facility along Washington Street, which would then result in a string of athletic facilities beginning with Cassell Coliseum, continuing with the indoor basketball practice facility, and the yet-to-be-built indoor football practice facility. This land along Washington Street is identified in the University Master Plan as "Athletics." Due to a sequence of events not made entirely clear in the meeting, the basketball facility was built first, next to Cassell Coliseum. It was further explained that the basketball facility was located further away from Cassell than originally planned due to fiber optic cables. This ultimately would push a football facility closer to town.

Reasoning was then given as to why the location along Washington Street was not suitable for the football practice facility. The rationale included: Dr. Steger once commented that the practice facility would not be an appropriate sort of building for Washington Street; more time would be required to move an outdoor football practice if it had to be relocated due to a change in weather; and the tennis courts would be lost. Given these reasons, Stadium Woods was then identified as the location. A discussion countering these reasons included the following: any building can be designed to look attractive; Washington Street is not a major entrance for campus; the difference in time to move a practice to the Stadium Woods location versus the Washington Street location is about 1 minute, which is very minimal considering the total amount of time it takes to suddenly relocate a practice; and new tennis courts are planned as shown in the University Master Plan.

Dr. Seiler then asked Mr. Gabbard if the actual reason why Stadium Woods was selected as the location was because "Coach Beamer wants it there." Mr Gabbard did not answer the question. It was also asked if we could meet with Coach Beamer, and Mr. Gabbard commented "you are meeting with us." Storm water retention was then discussed briefly. It was pointed out that moving from a land use of mature forest (Stadium Woods) to an impervious surface (new building) is a worst-case scenario for storm water planning. The Washington Street location is already a largely impervious surface requiring minimal mitigation. The claim was made that existing infrastructure located near Stadium Woods can handle the storm water and that no further land would be used for new storm water retention ponds.

There was also a discussion about the nature of the impact zone on the trees. Athletics and University Planning showed a building footprint plus 40 feet on all sides, which results in approximately 3 acres. Dr. Wiseman (Urban Forestry expert) and others stressed that this is not a fair distance from the building. Mature, large trees such as those found in Stadium Woods have root systems that require protection of a minimum of 60 feet from their trunks. The foot print shown and 3 acre number also does not include area for parking, access, or dumpsters. Further, staging areas for construction require areas typically as large as building footprints. University Planning indicated the staging for this building would be across Washington Street with access to the construction between Cassell Coliseum and the basketball practice facility. Others in the meeting questioned how staging for such a large project could be across a busy street and how large vehicles would drive between two buildings on a steep slope.

We then moved outdoors and walked through Stadium Woods discussing the ecology and pointing out the numerous centuries-old trees and structure of an old-growth forest. The meeting ended with no resolution, tasks, charges, or plans for future discussions.

President Steger Walks through Stadium Woods

At some point around December 17 or 18, 2011, University President Dr. Charles Steger visited Stadium Woods. This was reported to Dr. Seiler by Provost Dr. Mark McNamee at a meeting on January 5. Prior to this point, rumors had circulated that Dr. Steger was planning to or had visited the woods. Dr. Seiler was told that President Steger was "informed by a person of knowledge" that there were no trees older than approximately 80 years of age, which is factually incorrect. This may have led Dr. Steger to come away with being less impressed with Stadium Woods. President Steger requested University Planning to obtain an independent ecological assessment of Stadium Woods. The ecological assessment of Stadium Woods is being conducted by Biohabitats (www.biohabitats.com) located Baltimore, Maryland. The assessment will include an analysis using UFORE, a Land Suitability Index and an in-house metric they developed for ecological assessment. UFORE is an acronym for "Urban Forest Effects" and refers to a computer model that calculates the structure, environmental effects and values of urban forests.

President Steger Appoints a Committee to Study Stadium Woods

On January 19, 2012 President Charles Steger appointed a committee (Athletic Practice Facility Site Evaluation Committee, APFSEC) to study Stadium Woods and the siting of the proposed indoor practice facility. The APFSEC committee charge and membership is found in Appendix 6 and it is to submit its findings no later than June 1, 2012. Rebekah Paulson of FSW was further informed by Vice President Sherwood Wilson via e-mail that the BOV would not be considering the indoor practice facility at the March 25-26, 2012 meeting.

At the June 4, 2012 meeting of the BOV Dr. John Randolph, Chair of the APFSEC committee presented an overview of the findings and recommendations of the APFSEC report. The full report of the committee can be found in Appendix 7. In brief the committee made 5 recommendations which are listed here:

- 1. Designate Stadium Woods as a Reserve and develop a protection, management, and use plan for the Woods.
- 2. Relocate the proposed facility site from the Woods site to the Washington Street tennis court site and develop a site orientation and design that considers cost, aesthetics, mitigation of existing uses, and minimal impact on the Woods.
- 3. Commence construction of replacement tennis courts and roller hockey rink displaced by the Washington St. site before the existing facilities are closed.
- 4. Allocate incremental costs associated with the site relocation, which are a measure of the preservation value of the Woods, to funding sources other than Athletics and Recreational Sports.
- 5. Review procedures for assessing variance with the Master Plan to safeguard against future controversies of this type.

Literature Cited

Davis, M.B. 2006. Old growth in the east: A survey. Available online at: www.primalnature.org/ogeast/survey.html

DeWitt, James B.; Derby, James V., Jr. 1955. Changes in nutritive value of browse plants following forest fires. *Journal of Wildlife Management* 19(1): 65-70.

Oliver, C.D. and Larson, B.C. 1996. Forest Stand Dynamics. John Wiley and Sons, Inc. New York, NY, 520 pp.

APPENDICES

Appendix 1—Annotated core from tree number 101

Historical events during the life of white oak tree number 101 in Stadium Woods, age 346 years Robert Hooke American Discovers Cells Revolution 1665 1776 1865 Founded 1872 1918 1945 1969 Center of tree Available core, 13.75 inches long, 238 years Total length to center of tree 20 inches, ~ 346 years Wood core from tree 101 in Stadium Woods. The tree is a 40 inch diameter white oak on the footprint of the planned building. Core obtained was 13.75 inches long. At that point the middle of the tree was rotten. Number of rings found on the available core indicates that portion of tree grew over a period of 238 years. Another 6.25 inches of growth is needed to reach the center of the tree resulting in an estimated tree age of 346 years.

Appendix 2 – Washington Post article on Football Practice Facility

Washington Post article August 7, 2011

Posted at 12:44 AM ET, 08/07/2011

Virginia Tech has plans for a new indoor practice facility

By Mark Giannotto

It's been less than a year since the Virginia Tech football team moved into a brand new, \$18 million locker room. But on Saturday, athletic department officials made public their plans to add a new, and even more costly, amenity to the school's athletic campus.

With Rector Field House out of date, and featuring a ceiling too low to practice punts in, Virginia Tech is forging ahead with plans to construct a new on-campus indoor practice facility to be used primarily by the football team.

Associate athletic director Tom Gabbard, who is in charge of overseeing Virginia Tech's athletic facilities, said plans call for the entire project to cost \$25 million. The price tag includes a renovation of Rector Field House, which was built in 1971.

"When we get that, I truly think we will have the best facilities in the country," Coach Frank Beamer said.

Said Gabbard: "It's all about raising the money. As soon as we get \$25 million, we'll build it," He added that \$5 million in private donations have already been pledged, and an additional \$2-3 million is "in the bank."

Even without full funding, though, the project will continue to move forward. Gabbard said the school will settle on a design consultant in September. From there, several teams of architects and builders will be enlisted to come up with proposals and they would have 90 days to present their plans to a committee of school officials.

Construction, however, will not begin until the \$25 million is raised.

Gabbard said he'll leave the designing to the professionals, but that he wants to "look over there and have a building that's attractive. We'll have a pretty nice façade on the front and it's gotta be big – 60, 70, 80 feet in the air so you can kick in it."

Plans also call for state of the art audio/visual equipment to be inside the new facility. Gabbard hopes "to get cameras all over that building so you can even stop a piece of practice and take two lineman over and show them a technique and it's right there."

Gabbard has already toured Air Force's new \$15 million indoor practice facility, as well as the New England Patriots indoor facility. He's also seen video of the Atlanta Falcons'facility — "Frank really liked that one," — and plans to go visit a couple more during the coming months.

Virginia Tech's new indoor facility will be located in a wooded area adjacent to the Hokies outdoor football practice fields, just beyond the north end zone of Lane Stadium. Gabbard said part of the project will involve removing 30 feet of elevation and moving approximately 80,000 cubic yards of dirt from the woods.

Currently the Hokies use Rector Field House when inclement weather prevents them from practicing outdoors, but they share the facility with several other Virginia Tech teams, most notably track and field. The new indoor facility would also be used by the women's lacrosse and soccer teams, while also allowing the track and field team more access to Rector Field House.

Gabbard seems well aware, though, that with the ever-present college football arms race, this likely isn't the last big facilities project the athletic department will undertake.

"As soon as you build them, somebody's building one better," Gabbard said. "It's a constant battle, facilities are always gonna be. If you're not growing, you're dying sort of thing. But it would be huge. It would really put an icing on the cake for us."

Appendix 3 – Arboretum Committee Position Statement on Building in Stadium Woods



Department of Forest Resources and Environmental Conservation

228 Cheatham Hall (0324) Blacksburg, Virginia 24061 540-231-5148 Fax: 540-231-3330 email: pwiseman@vt.edu www.frec.vt.edu

To: Mike Coleman, Associate Vice President for Facilities Services

CC: Susan Day, Matt Gart, Roger Harris, Mark Helms, Brian Katen, Tom Martin, Alex Niemiera,

John Seiler, Bill Shrader, Jay Stipes, Anthony Watson

From: Eric Wiseman, Associate Professor of Urban Forestry and Chair of the Virginia Tech

Arboretum Committee

Date: 11/11/11

Re: Football Practice Facility at Stadium Woods

The Arboretum Committee of Virginia Tech is a group of university faculty and staff formed in the 1980s under the leadership of the late Dr. Pete Feret, professor of forestry. The purpose of the committee is to advocate for wise stewardship of campus trees and forests and to provide technical advice to university staff about matters related to these natural resources.

The Arboretum Committee has been informed about the Athletic Department's intent to construct a football practice facility adjacent to Lane Stadium. The design concept of this facility requires encroachment into the adjacent old-growth woodland, which the Arboretum Committee strongly opposes. The reason for this opposition is predicated on the woodland's unique character:

- It is the only woodland on central campus that possesses characteristics of old-growth forest, having a full complement of forest soil, woody debris, understory vegetation, and overstory vegetation
- The woodland is populated by over fifty trees measuring greater than three feet in diameter, many of which are estimated to be over 250 years of age
- The woodland is seasonally inhabited by over 60 species of birds, many of which are neotropical migrants not found in urbanized landscapes or diminutive forest fragments

Because of this unique character, the woodland provides a range of benefits to the community that are not available elsewhere on central campus and that cannot be replicated within a reasonable timeframe through mitigative landscaping or tree planting. Among the woodland benefits that will be impacted by the construction project are:

- Environmental education for Virginia Tech students, visiting K-12 students, and adult learners
- · Outdoor recreation and leisure for students, faculty, staff, visitors, and nearby residents
- Stormwater mitigation through tree canopy interception and forest soil detention
- Soil erosion control through vegetative and litter cover and plant root systems
- · Habitat for an assortment of flora and fauna that are dependent on old-growth forest

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The Arboretum Committee recognizes that only a portion of the woodland would be impacted by the proposed project. However, the Committee believes that reducing the size of the woodland would jeopardize its long-term utility and health due to concentrated use on a smaller land base and increased susceptibility to invasive plants and animals that commonly overtake small parcels. Given that the unique character and benefits of this woodland would be impacted by construction of the proposed facility, the Arboretum Committee urges the university to consider alternative construction sites or alternative facility designs that will avoid encroachment into the woodland and gladly offers to assist the university in exploring these alternatives.

Faculty Members on the Virginia Tech Arboretum Committee

Susan Day
Assistant Professor
Dept. of Forest Resources & Environmental
Conservation and Dept. of Horticulture

Roger Harris Professor and Department Head Dept. of Horticulture

Brian Katen Associate Professor and Landscape Architecture Program Chair School of Architecture & Design

Tom Martin Instructor Agricultural Technology Program College of Agriculture & Life Sciences

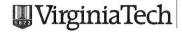
Alex Niemiera Associate Professor Dept. of Horticulture John Seiler Alumni Distinguished Professor Dept. of Forest Resources & Environmental Conservation

Jay Stipes
Professor Emeritus
Dept. of Plant Pathology, Physiology, and Weed Science

Eric Wiseman (Chair)
Associate Professor
Dept. of Forest Resources &
Environmental Conservation

Appendix 4 - Memo from Dr. Sherwood Wilson to Faculty Senate

Charles W. Steger, President



210 Burruss Hall (0131) Blacksburg, Virginia 24061 540/231-6231 Fax: 540/231-4265 E-mail: president@vt.edu www.vt.edu

December 6, 2011

Virginia Tech Faculty Senate

Dear Senators:

I am writing in response to the resolution the Faculty Senate plans to take up on December 13, 2011 supporting protection of the Stadium Woods.

First, I wanted to let you know that we are listening to the concerns that are being expressed publicly and by university faculty, staff and students.

The proposed practice facility is still in the early planning stages. Though it has been included in the capital planning process since 1999, it has been on hold for a number of years. To date, the university has conducted a downstream channel adequacy (storm water) analysis, solicited proposals for a criteria consultant for preliminary design services, and established a committee to review the aforementioned proposals. At this time, we are still gathering information from experts on all aspects of the proposed facility and site. As part of our information gathering, we have reached out to the university's experts on forestry management in the College of Natural Resources and Environment and have requested that they be included in our information gathering process. We have also reached out to the Virginia Tech Arboretum Committee. The Arboretum Committee advises us on forestry management interests, and the group only recently brought their concerns regarding the proposed location to our attention.

We value the input of the university community in our planning processes. As soon as we have additional information on this project to share we will communicate that information to the entire university community.

Sincerely,

Sherwood G. Wilson, Ph.D. Vice President for Administrative Services

c: Charles W. Steger Mark G. McNamee

Appendix 5 – Faculty Senate Resolution Supporting Protection of Stadium Woods

THE FACULTY SENATE OF VIRGINIA TECH: RESOLUTION SUPPORTING PROTECTION OF STADIUM WOODS December 13, 2011

Regarding the proposal to destroy a portion of Stadium Woods in order to construct an indoor athletic training facility for the football, soccer, and lacrosse teams:

WHEREAS, Virginia Tech has publicly committed itself to value sustainability, and to engage in sound environmental stewardship; and

WHEREAS, Virginia Tech has been designated as a Tree Campus USA; and

WHEREAS, the Town of Blacksburg, of which Virginia Tech is a part, has been designated as a Tree City USA, and has vigorously promoted environmental sustainability; and

WHEREAS, the Stadium Woods are the only woodland on central campus that possesses characteristics of old-growth forest, essentially comprising a self-contained forest ecosystem, populated by over fifty trees measuring greater than three feet in diameter, many of which are over 300 years of age, and is seasonally inhabited by over 60 species of birds, many of which are neo-tropical migrants, not found in urbanized landscapes; and

WHEREAS, the 2009 Virginia Tech Master Plan Amendment designates the Stadium Woods as an "environmental greenway," thus as "a significant reservation of lands, waterways, tree stands, and cultural landmarks for future generations"; and

WHEREAS, the Stadium Woods are used by faculty to conduct both classes and research, and also are used for environmental education for visiting K-12 students and adult learners; and

WHEREAS, the Stadium Woods are used for outdoor recreation and leisure by students, faculty, staff, visitors, and nearby residents; and

WHEREAS, the Stadium Woods enhance the aesthetics and character of the Lane Stadium area; and

WHEREAS, the Stadium Woods are a living reminder of the natural history of campus and the region; and

WHEREAS, the Stadium Woods are important for community storm water mitigation through canopy interception and forest soil detention, and provide soil erosion control through vegetative and litter cover and plant root systems; and

WHEREAS, the Stadium Woods are a habitat for an assortment of flora and fauna that are dependent on old-growth forest; and

WHEREAS the Arboretum Committee of Virginia Tech, whose purpose is to advocate for wise stewardship of campus trees and forests and to provide technical advice to the administration of the University concerning matters related to these natural resources, strongly opposes this project; and

WHEREAS, the long-term utility and health of Stadium Woods will be negatively impacted by this building project, and that the unique character and benefits of the Stadium Woods will be irreparably harmed by the proposed building project;

THEREFORE, BE IT RESOLVED, that the Faculty Senate of Virginia Tech asks that the Office of the President and the Athletic Department of Virginia Tech stop all plans to develop Stadium Woods.

ADDITIONALLY, BE IT FURTHER RESOLVED, that the Faculty Senate of Virginia Tech asks that the Office of the President begin the process to designate Stadium Woods as a permanently protected place.

Appendix 6 -- Committee Appointment letter and Charge

Sherwood G. Wilson



Vice President for Administrative Services 248 Burruss Hall (0182) Blacksburg, Virginia 24061 540/231-4416 Fax: 540/231-1401 www.vt.edu

January 17, 2012

Dr. Eric Wiseman Associate Professor and Extension Specialist Urban Forestry (0324) 228 Cheatham Hall Virginia Tech Blacksburg, VA 24061

Dear Dr. Wiseman:

The community has expressed concern regarding a proposal to site the Indoor Athletics Practice Facility in the ROTC training area located in the portion of the woodland behind the football practice field. The area is located north of Lane Stadium on the south end of campus. We recognize this is an important issue for various constituency groups and want to be certain that all voices are heard. We value the input of the university and larger community in this important planning process. Accordingly, Dr. Steger asked me to establish a committee to ascertain the facts, evaluate the data on the proposed site and other potential sites, and assess the perspectives of various constituencies. I am writing to ask you to serve on the Committee. I have asked John Randolph, Professor in Urban Affairs and Planning, to chair the Committee. The list of Committee members and the constituency groups they represent are provided in an attachment to this letter. Hugh Latimer in the Office of University Planning will serve as a resource to the Committee.

The work of the Committee will begin immediately. This will be an operational committee charged with developing recommendations for how the university can resolve the need for a critical athletics facility in close proximity to existing facilities while also being good stewards of our natural resources. The recommendations should include the advantages and disadvantages of each site that is being considered by university planning staff. The Committee's recommendations should be delivered to me no later than June 1, 2012.

Among other factors, the Committee should consider the following questions:

- Do the woods have significant intrinsic historic or natural value?
- To what extent is the ecosystem found in these woods unique on the Virginia Tech campus?
- How many and what age and species trees would be impacted by the current proposal? What is their current health and projected life?
- Is the area a unique bird sanctuary? If so, how would construction on a portion of the site impact birds that reside on the site or use the land for migration?

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Dr. Wiseman Page 2

- Is this a unique publically available/accessible old growth urban woodland in the corporate limits of the Town of Blacksburg?
- Do the woods have special significance for campus or local community life?
- To what extent are the woods currently being used by the local and campus community?
- To what extent are the woods used as a teaching tool?
- Is there current research being conducted in the woods?
- Would a building site that is not contiguous to Athletics' main facilities negatively impact student athletes in terms of NCAA limits on practice hours per week?
- What other sites could serve the operational needs of the athletics program for this facility?
- What are the benefits and costs of this and alternative sites including the intended beneficial use of the facility, its construction and mitigation costs, and its environmental, academic, and social impacts?
- To what extent could minor site modification, sensitive construction practices, and other measures, mitigate the impacts of the proposed facility on the existing woods?
- What are the perspectives on this siting issue among the various constituents of the university community, including students, faculty and staff, student athletes, athletic department representatives, Town residents, alumni, university patrons, and others?

I appreciate your service on this important Committee. I have selected members from a variety of constituency groups to promote an open review that allows for the gathering of information and data in an objective manner. I look forward to receiving the Committee's recommendations.

Sincerely

Skerwood G. Wilson, Ph.D.

Vice President for Administrative Services

c: Charles W. Steger
Mark G. McNamee
Mike Coleman
Jack Davis
Larry Hincker
Rich Sorensen
Ed Spencer
Jim Weaver

Paul Winistorfer

INDOOR ATHLETICS PRACTICE FACILITY EVALUATION COMMITTEE

Committee Chair:

Dr. John Randolph, Professor and Chair of Urban Affairs and Planning, Member of the Energy and Sustainability Committee

Committee Members:

Dr. Eric Wiseman, Associate Professor and Extension Specialist, Urban Forestry and Chair of the Arboretum Committee

Dr. Sarah Karpanty, Assistant Professor, Wildlife Biology and President Elect, VT Faculty Senate

Ms. Kara Dodson, Student, College of Natural Resources and Environment, President of the Virginia Tech Environmental Coalition and student representative to the Energy and Sustainability Committee

Dr. Jeff Walters, Harold Bailey Professor of Biological Sciences

Ms. Leigh LaClair, Deputy Chief Facilities Officer

Ms. Maxine Lyons, President of the Staff Senate and Staff Representative to the Board of Visitors

Mr. Dean Bork, Associate Professor, Landscape Architecture

Ms. Emily Wilkinson, Vice President of the Student Government Association

Mr. Tom Gabbard, Associate Director of Athletics, Internal Affairs

Dr. Art Keown, Department Head, Finance, Insurance and Business Law and Chair of the Athletics Committee

Dr. Larry Killough, KPMG Professor, Accounting and Information Systems and Faculty Representative to the NCAA

Mr. Chris Wise, Director, Student Affairs

Mr. Glenn Reynolds, Reynolds Architects Incorporated (Local Business Owner)

TBD - Town of Blacksburg Citizen