### Physical Resources

<table>
<thead>
<tr>
<th>Land and Facilities</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Virginia Tech owned, Holland Road</strong></td>
<td>163 acres: Office complex, laboratories, farm buildings, cropland, swine research unit, lake</td>
</tr>
<tr>
<td><strong>Virginia Tech owned, Hare Road locations</strong></td>
<td>216 acres: Hare Road Farm, buildings, pond; 3 acres: research boar stud unit</td>
</tr>
<tr>
<td><strong>Duke Farm lease</strong></td>
<td>35 acres of cropland contiguous with the Holland Road location</td>
</tr>
</tbody>
</table>

**Director** – David Langston, 757-657-6450 (ext. 410), dbleangston@vt.edu

### Resident Faculty

<table>
<thead>
<tr>
<th>Faculty</th>
<th>Research and Extension Focus Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maria Balota (Associate Professor, Plant Pathology, Physiology, and Weed Science (PPWS))</td>
<td>Peanut and sorghum physiology. Leader of the multi-state Peanut Variety and Quality Evaluation program.</td>
</tr>
<tr>
<td>Mark Estienne (Professor, Animal and Poultry Sciences (APSC))</td>
<td>Swine physiology and reproduction, management, and welfare in commercial swine herds; Extension programming in swine production.</td>
</tr>
<tr>
<td>Hunter Frame (Assistant Professor, Crop and Soil Environmental Sciences (CSES))</td>
<td>Agronomics in field crops with emphasis on cotton production and management.</td>
</tr>
<tr>
<td>David Langston (Professor, PPWS)</td>
<td>Plant disease, diagnostics, and applied plant disease management.</td>
</tr>
<tr>
<td>Ames Herbert (Professor, Entomology)</td>
<td>Insect management in cotton, soybean, peanut, corn, small grains.</td>
</tr>
<tr>
<td>David Holshouser (Associate Professor, CSES)</td>
<td>Agronomics in field crops with emphasis on soybean production and management.</td>
</tr>
<tr>
<td>Hillary Mehl (Assistant Professor, PPWS)</td>
<td>Disease management in cotton, soybean, peanut, corn, small grains.</td>
</tr>
</tbody>
</table>

### Other Faculty Conducting Research and Collaborative Work

<table>
<thead>
<tr>
<th>Faculty</th>
<th>Research Involvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charles Cahoon (Assistant Professor, PPWS)</td>
<td>Weed management in staple crops</td>
</tr>
<tr>
<td>Michael Flessner (Assistant Professor, PPWS)</td>
<td>Weed extension</td>
</tr>
<tr>
<td>Elizabeth Grabau (Professor, PPWS)</td>
<td>Transgenics for improved disease resistance in peanuts</td>
</tr>
<tr>
<td>Carl Griffey (Professor, CSES)</td>
<td>Small grain genetics and breeding</td>
</tr>
<tr>
<td>Rory Maguire (Associate Professor, CSES)</td>
<td>Nutrient management</td>
</tr>
<tr>
<td>Mark Reiter (Associate Professor, Eastern Shore AREC)</td>
<td>Fertilization management of field crops</td>
</tr>
<tr>
<td>Steve Rideout (Associate Professor, Eastern Shore AREC)</td>
<td>Disease management in winter wheat</td>
</tr>
<tr>
<td>Wade Thomason (Associate Professor, CSES)</td>
<td>Corn and small grain variety testing</td>
</tr>
</tbody>
</table>

### Farm Management, Technical, Office Staff, Postdoctoral Scientist and Graduate Students

<table>
<thead>
<tr>
<th>Funding Category</th>
<th>Employees</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Funded, full-time</td>
<td>10</td>
<td>Includes farm manager, assistant, 2 office staff, 6 technical staff</td>
</tr>
<tr>
<td>Grants and Contracts, full-time</td>
<td>11</td>
<td>Technical staff employees</td>
</tr>
<tr>
<td>Grants and Contracts, part-time</td>
<td>25</td>
<td>Includes 1500 hour/year, seasonal and summer employees</td>
</tr>
<tr>
<td>Graduate Students</td>
<td>8</td>
<td>Graduate Students, M.S. and Ph.D. candidates</td>
</tr>
</tbody>
</table>
Research and Extension Programs

- Improving the accuracy of potassium fertilization for full-season and double-cropped soybean.

- Impact of alternative tillage systems in cotton growth and lint yield.

- Development of peanut varieties with increased oleic vs. linoleic fatty acid ratio, drought tolerance, improved water use efficiency, and earlier maturity characteristics for the Virginia-Carolina production region (PVQE program).

- Use of dietary copper supplementation to improve reproduction in sows.

- Determining research-based crop hybrid and variety selection information through variety testing programs in corn, cotton, peanut, sorghum, soybean, and wheat.

- The Peanut - Cotton InfoNet (http://webipm.ento.vt.edu/cgi-bin/infonet1.cgi) and Peanut Hotline (1-800-795-0700) providing crop management information including crop disease and frost advisories updated daily throughout the growing and harvest seasons.

- The Virginia Ag Pest and Crop Advisory (www.ext.vt.edu/agadvisory), a blog for rapid delivery of up-to-date information on crop pests in Virginia.

- Plant disease and insect pest diagnostic services and annual Pest Management, cotton production and peanut production guides.

- Certification programs in production quality assurance for pork producers as required by process verified marketing systems.

- Educational programs, field tours, seminars and demonstrations on current issues relevant to row crop and swine production for Extension Agents, growers and industry workers.

- Using commercially available hormones to enhance swine reproductive efficiency in batch management systems.

- Evaluation of genetically altered cotton varieties for insect tolerance and performance.

- Development of systems to improve thrips control in cotton and peanuts.

- Statewide soybean insect pest surveillance program.

- Management of invasive insect pest species: the brown marmorated stink bug and kudzu bug.

- Mid-Atlantic regional project to increase yield and profitability of double-crop soybeans.

- On-farm validation of a fungicide decision aid in soybean.

- High throughput phenotyping for tolerance to biotic and abiotic constraints to sorghum production in the V-C region.

- Variable-rate soybean seeding.

- Development of wheat varieties adapted to early planting to facilitate early harvest and early double-crop soybean planting.

- Development of practices allowing early wheat harvest and double-crop soybean planting.