

**HJR527 Invasive Plant Species Work Group
June 9, 2021**

WORKING GROUP MEMBERS PRESENT

Nathan Burrell, Department of Conservation and Recreation
Clyde Cristman, Department of Conservation and Recreation
Larry Nichols, Virginia Department of Agriculture and Consumer Services
Glenda Booth, Audubon Society of Northern Virginia
John Burke, Fairfax County Park Authority
Alison Clock, Garden Club of Virginia
Corry Conners, Virginia Forestry Association
Alex Fisher, The Nature Conservancy
Neal Beasley, Virginia Nursery and Landscape Association
Jennifer Hughes, Virginia Nursery and Landscape Association
Jim Hurley, Virginia Native Plants Society
Martin Krebs, Virginia Department of Transportation
David Lisowski, Virginia Chapter of the American Society of Landscape Architects
Steve Living, Virginia Department of Wildlife Resources
Ben Rowe, Virginia Farm Bureau Federation
Beck Stanley, Virginia Agribusiness Council
Ed Zimmer, Virginia Department of Forestry
Scott Douglas, Virginia Tech
Chris McDonald, Virginia Association of Counties
Craig Regelburg (sp?) Virginia Horticulture Association

AGENCY STAFF PRESENT

Tom Smith, DCR
Melissa Baker, DCR
Julie Buchanan, DCR
Jason Bulluck, DCR
Amy Ewing, DWR
Michael Fletcher, DCR
Kevin Heffernan, DCR
David Giannino, VDACS
Jason Powell, Senate Finance Committee
Joel Maddux, VDACS

OTHERS PRESENT

Nora Callahan
Paige Thacker, Prince William County
Pamela Watson
Pat Calvert, VCNVA.org

Renee Grebe,
Rod Walker
Roz Stein
Sam Blumenfeld, NCSU.edu
Sara Weitman, ODU.edu
Scott Douglass, SPES
Sol Camen Anstein
Steve Lucas, Louisa County
William Hammersky
Josh Goomey, Fairfax County
Kyle Shreve, Virginia Agribusiness
Lauren Taylor
Luke Peters
Mark Haynes
Maggie Lindsay, Cambium Assessment
Margaret Fisher
Marieke K. Jones
Nancy Vehrs
Judy Fulton
Jay Moore
Jenn D'Augustine
Jennifer Fennell
Jennifer Soles
Jocelyn Meloy
Alonso Abugattas
Ann Pierce
Claudia Thompson Diehl
Craig Regelbrugge, American Horticulture...
Dan Holmes, Piedmont Environmental Council
David Braatz, SI.edu
Delegate David Bulova
Elizabeth Mizell
Julie Flanagan
Janene Cullen
Barbara Ryan
Barry Steinberg
Marian Lobstein
Carolyn Haynes

CALL TO ORDER AND INTRODUCTIONS

Mr. Burrell called the meeting to order at 10:00 a.m. He advised that the purpose of the meeting was to address HJR527 and to move forward with recommendations to prepare the

report to the General Assembly. He asked members of the Work Group and agency staff to introduce themselves.

Mr. Burrell welcomed Delegate David Bulova and offered the opportunity for Delegate Bulova to provide remarks.

Delegate Bulova thanked Mr. Burrell and commented that he had been passionate about the issue of invasive species for some time. He commended the team put together to address the issue. He noted that this is not just a Virginia problem but a global problem and advised that a simple Google search would give an indication of how pervasive the issue really is.

Delegate Bulova advised that the solutions are not always clear. It will take the right mixture of legislation and education working with a group like this to make it happen. He commented that he would welcome the opportunity to take forward to the General Assembly legislation to address this issue.

Mr. Burrell asked Mr. Fletcher to provide a brief overview regarding FOIA and electronic meetings.

Mr. Fletcher reviewed the provisions for electronic meetings as outlined under a declared State of Emergency. He reminded members that the meeting would be recorded. He asked that members and the public keep their microphones on mute unless they wished to speak. He noted that there would be a time for public comment at the end of the meeting.

Workgroup Assignment (HJ527)

Mr. Nichols noted that the work group assignment was to address the provisions of House Joint Resolution 527. Basically the resolution requires DCR and VDACS to conduct a study of the sale of invasive plants with the retail, landscape, and nursery industries, and to measure and reduce or eliminate the sale with a focus on the Invasive Species list maintained by DCR.

Mr. Nichols advised that the resolution would look at the need to add to the list of noxious weeds included in 3.2-800 of the Code of Virginia as well as the accompanying regulations. Also included is an outreach to include partnerships with nonprofits for educational purposes.

Mr. Nichols called on David Gianino to give a presentation regarding the Noxious Weeds Law and Regulations.

Noxious Weeds Law and Regulations Overview
David Gianino
Program Manager, Office of Plant Industry Services, VDACS

Noxious Weeds Law (3.2-800 et seq)

- Provisions of the Noxious Weeds Law
 - Prohibits the movement of any noxious weeds, or part thereof, or any regulated article into or within the Commonwealth, without first obtaining a permit;
 - Establishes conditions of permit issuance;
 - Describes the charge of the noxious weed advisory committee; and
 - Authorizes the Board of Agriculture to adopt regulations to carry out provisions of the Noxious Weeds Law.

Noxious Weeds Law (3.2-800 et seq)

- Noxious Weed: means any living plant, or part thereof, declared by the Board through regulations under this chapter to be detrimental to crops, surface waters, including lakes, or other desirable plants, livestock, land, or other property, or to be injurious to public health, the environment, or the economy, except when in-state production of such living plant, or part thereof, is commercially viable or such living plant is propagated in Virginia.
- Regulated Article: means any article of any character as described in this chapter or in the quarantine carrying or capable of carrying a noxious weed against which this chapter or the quarantine is directed.
- Permit: means a document issued or authorized by the Commissioner to provide for movement of regulated articles to restricted destinations for limited handling, utilization, processing, or for scientific purposes.

Noxious Weeds Regulation – 2 VAC 5-317

- Provides regulatory framework to carry out provisions of the Noxious Weeds Law including:
 - Regulate the movement of noxious weeds and regulated articles,
 - Outlines conditions required to issue permits,
 - Establishes the Noxious Weed Advisory Committee,
 - Describes how a noxious weed is to be added to the noxious weed list, and
 - Categorize list of noxious weeds.

Mr. Gianino noted that the list of noxious weeds is documented under the regulation, and not the law.

Noxious Weed Advisory Committee

- Assists the department (VDACS) in the evaluation and risk assessment of plants that may be declared noxious weeds.

- Comprised of members from agricultural, horticultural, and environmental industries, as well as representatives from Virginia's land grant universities and relevant executive branch agencies
- 16 listed in the regulation:
 - A conservation representative or organization
 - An agribusiness representative or organization
 - A local government representative or organization
 - Virginia Cooperative Extension
 - Virginia Department of Conservation and Recreation
 - Virginia Department of Forestry
 - Virginia Department of Wildlife Resources (formerly DGIF)
 - Virginia Department of Transportation
 - A farming representative or organization
 - A forage-based agriculture representative or organization
 - A native plant conservation representative or organization
 - A nursery and landscaping representative or organization
 - Virginia Polytechnic Institute and State University
 - Virginia State University
 - A cooperative weed management area representative or organization, and
 - Virginia soil and water conservation districts

Noxious Weed Assessment Tool

- Developed by the Noxious Weed Advisory Committee
- Scientifically based risk assessment tool
 - Environmental, economic, invasiveness, ecological, biology of the plant, distribution, and reproduction potential

It is required that the documentation be accompanied by scientific article to ensure that the information is science based.

- Open to the public
 - Anyone can submit a nomination by going through the assessment tool

The assessment tool is available on the DCR and VDACS website.

Committee Meeting and Assessment Review

- Noxious Weed Advisory Committee meets at least once annually
- Review and discuss noxious weed assessment submissions
- Evaluates the plant species and makes recommendation
- VDACS proposes recommendations to the Board of Agriculture and Consumer Services

Regulatory Process – Adding species to the list

- Initiated the standard regulatory process March, 2018, that process
 - Added 1 plant species to Tier 2
 - Added 5 plant species to Tier 3
 - Became effective, July, 2020
 - The process took two years, three months

Categories of Noxious Weeds

There are three tiers in the noxious weed regulation, they are:

- Tier 1 – any noxious weed that is not known to be present in the Commonwealth
- Tier 2 – any noxious weed that is present in the Commonwealth and for which successful eradication or suppression is feasible
- Tier 3 – any noxious weed (i) that is present in the Commonwealth, (ii) whose spread may be slowed by restrictions on its movement, and (iii) for which successful eradication is not feasible

Noxious Weeds – Listed Species

The current list of noxious weeds is as follows:

- Tier 1
 - Giant Salvinia
 - Tropical soda apple
 - Giant hogweed
- Tier 2
 - Cogon grass
 - Purple loosestrife
 - Water spinach
 - Beach vitex
 - Wavyleaf basketgrass
 - Incised fumewort
- Tier 3
 - Tree of heaven
 - Porcelain berry
 - Oriental bittersweet
 - Hydrilla
 - Mile-a-minute weed

These are listed under the regulations.

Ms. Booth how long it took for the 18 listed plants to become part of the list.

Mr. Gianino noted that six plants were added with the most recent process. The others were added when the regulation was established through the initial process.

Mr. Gianino gave the example of golden bamboo. Because this project is commercial viable, it does not meet the definition of noxious weeds. However, he noted that those species on the list cannot go into commercial production.

Mr. Burrell called on Kevin Heffernan to give a presentation regarding the Virginia Invasive Species list maintained by DCR.

Assessing and Ranking Invasive Plant Species in Virginia

Kevin Heffernan, Stewardship Biologist
DCR Division of Natural Heritage

Mr. Heffernan advised that the basic question is how a species is placed on the DCR Invasive Plants List. He noted that this is an educational, not a regulatory, list.

There are 90 species on the current Virginia Invasive Species list.

Mr. Heffernan noted that the definition of “invasive” comes from Federal Executive Order 13112 signed in 1999.

Invasive species are introduced species that cause or have the potential to cause ecological or economic harm or harm to humans.

Mr. Heffernan noted that the key word is introduced by humans, intentionally or accidentally. He advised that the list is determined from a risk assessment tool developed by The Nature Conservancy.

Mr. Heffernan noted:

- There are 400,000 plant species on Earth (estimate)
- In North America, there are 18,000 species living wild and free, these are species not cultivated in greenhouses.
- 30,000 species have been introduced in North America over the past 400 years
- 5,000 of those species escaped cultivation and started reproducing on their own
- There are 3,100 species in the Commonwealth of Virginia
- 600 of those were introduced in the last 400 years

- DCR has a list of 90 invasive species

Mr. Heffernan reviewed the Invasive Plant Risk Assessment Protocol.

Invasive Plant Risk Assessment Protocol

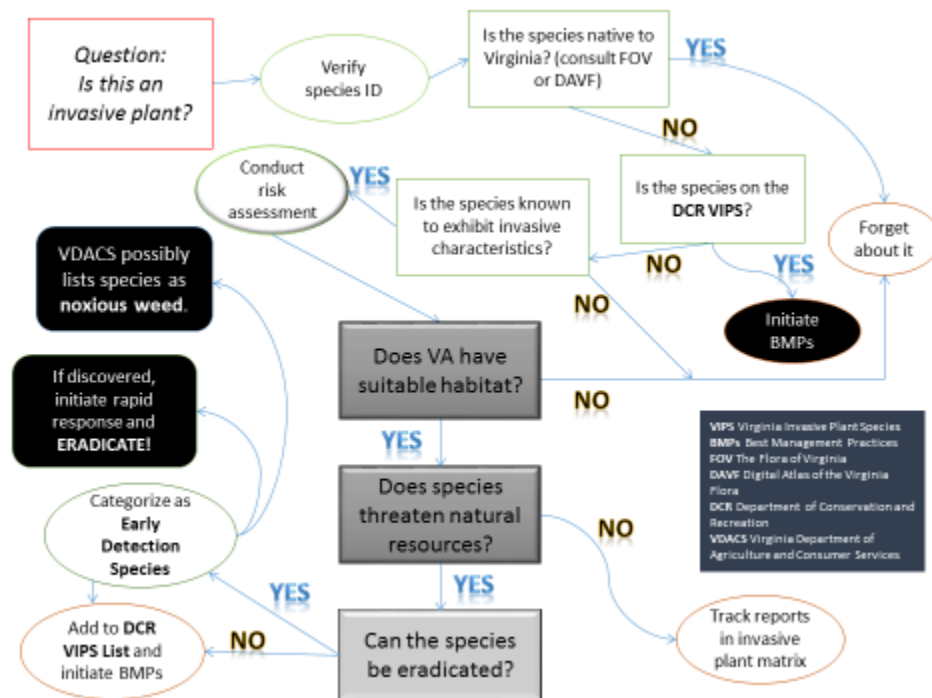
- Developed by NatureServe and partners
- Scalable to specific state or region
- Multiple choice questions with weighted answers
- Creates a record of the various information sources that goes into the ranking system

The I-rank of a species increases to the degree that the species is documented to:

- Alter ecosystem processes, such as success, light availability, water or soil chemistry, hydrology or fire regime
- Invade undisturbed natural communities
- Cause substantial impacts on rare or vulnerable species or natural communities or high-quality examples of more common communities
- Be widely distributed or generally abundant where present
- Disperse readily to new areas
- Resist control

The DCR list has a primary focus on natural areas, conservation areas, more than it does gardens or agricultural landscapes.

Mr. Heffernan gave the following illustration regarding adding a species to the DCR list.



Invasive Plant Risk Assessment Components

- Screening questions
- Ecological impacts
- Current distribution and abundance
- Trends in distribution and abundance
- Management difficulty

Under the four areas, DCR looks at the following:

Ecological Impact

- Ecosystem processes
- Community structure
- Community composition
- Individual species
- Conservation significance

Current Distribution and Abundance

- Current range in region
- Proportion of range where negative impacts
- Proportion of region's habitats impacted

- Diversity of habitats impacted

Examples:

- Tree of heaven is in the majority of locations in Virginia.
- Beach vitex in only one Virginia county, but widespread across the southern region.

Trend in Distribution

- Current trend in region
- Proportion of potential range occupied
- Long-distance dispersal potential
- Ability to invade conservation areas
- Similar habitats invaded elsewhere
- Reproductive characteristics

Management Difficulty

- General management difficulty
- Minimum time commitment
- Management impacts on natives
- Accessibility of invaded areas

Management encompasses a wide range of techniques from hand pulling to widespread chemical or other treatment.

How Were Plants Chosen for Assessment?

- Began with 109 species on the list in 2012
- Created a database
- Added species from other state lists and federal lists in the Mid-Atlantic region
- EDDMaps
- NatureServe
- Recommendations from field staff and other sources

Results of the 2013 Assessment

- 90 species
 - 2009 – 109
- 31 species removed, primarily from narrowing focus
- 12 species added
 - Eight are early detection species

- 6 species increased in rank
- 4 species decreased in rank

Invasiveness Ranks (I-ranks)

- High
 - 38 species
- Medium
 - 36 species
- Low
 - 16 species

Invasive Plant List – Early Detection Species

- Not yet present, or
- Present, not yet widely established
- Pose demonstrated threat to ecological or economic values
- 10 species on the 2013 list

Mr. Hurley commented that he and Mr. Walker had been working on the issue of noxious weeds for about twenty years. He serves as a member of the Noxious Weed Advisory Committee. He noted that about half of the 90 species on the DCR list are in commercial trade.

Ms. Booth asked if DCR had proposed merging the invasive species list with the noxious weed law.

Mr. Cristman gave the example of Senator Hanger attempting to ban the sale and propagation of bamboo. Over a three to four year legislative process, the end result was the provision to allow localities to adopt local ordinances regarding the spread of bamboo.

Mr. Cristman did note that he had discussions with Delegate Bulova and Senator Marsden regarding continuing this discussion. He advised that typically VDACS has had the regulatory role while DCR served in an advisory capacity.

Mr. Bulova noted that while the legislative process can be lengthy, having the work proposed for this committee can often help develop a consensus to move forward more rapidly.

Mr. Living asked if there had been thought concerning how the impact of climate change or sea level rise would affect invasive species. He noted that a temperature change could make a significant difference.

Mr. Heffernan replied that he had not yet found a way to track that. However, looking at trends captures much of that information. Most notably the observation of plants moving north from the southern U.S. is a good indicator

Ms. Booth noted that the Department had previously published an invasive species plan. She asked that it be reviewed at the next meeting.

Mr. Nichols reviewed the process for the work group moving forward.

He asked what it means to address the issues in the resolution if there are no statutory changes? Noxious weeds can still be added to the regulations under current provisions.

If there are no changes, then how does the work group work to reduce, mitigate and eliminate the continued sale of invasive plant species in Virginia.

- Labeling recommendations
- Tax recommendations
- Adding invasive species to the current Noxious Weeds List
- Education and Outreach
- Increase the use of native plants on state or local properties

Mr. Nichols advised that each of those five areas would be reviewed with each option.

Next the work group would look at the need for statutory changes.

Option three would be a modified statutory change, somewhere between options 1 and 2.

Mr. Nichols noted that these options were provided for discussion. Members may feel free to offer other scenarios. In the end, the study group will develop a report to reflect the conversations and recommendations.

Mr. Nichols noted that every meeting will allow at least 15 minutes of public comment.

Mr. Nichols advised that the goal was to finish the meetings, prepare the report, and send that report out to members to review before it is forwarded to the General Assembly.

Mr. Burrell noted that the hope is to develop a consensus, but also stated that all recommendations will be included.

Mr. Cristman noted that it is also important to consider a funding source. These issues would be enhanced if there was some funding available.

Ms. Hughes suggested that with regard to budget or tax recommendations a type of permit could be developed to generate revenue.

PUBLIC COMMENT

Mr. Burrell called for public comment.

Luke Peters – He advised that while we want to respect personal property rights, the environment is an area where the government has a role to step in and maintain more complex social contracts. A public info campaign won't be enough – citizens don't especially care, and nurseries are unsympathetic at best. Invasives have 1-to-1 economic substitutes in their native analogues. Virginia is starting to recognize the co-benefits of environmental services, and, if monetized (like carbon credits), the cost of the man-hours needed to remove invasives and the harm they do to the environment would be in the millions. The burden on private property owners will need to be considered – e.g. the elderly will have trouble with invasives removal, and non-profits may need to step in. His recommended plan of action is to first: immediately stop the sale of invasives. Second: later on give localities the ability to fine people for having banned plants on their property. Third: add a tax to the sale of naturalized, non-invasive but still non-native plants. Changing the ideas around native plants' economic benefit would then conform better with the intent of the current noxious weeds law, where invasives are allowed to be grown for profit. Other states have already enacted similar laws, so there's a good policy roadmap. Something needs to be done, however, or else biodiversity will suffer. Future technologies could also be created to help tackle invasives if a helpful regulatory environment is created.

Nancy Vehrs – Ms. Vehrs noted she is President of the Virginia Native Plants Society, a group of more than 2,200 people. She encouraged the work group to be bold. She noted that other states have taken significant action. Virginia can look to those states to help develop a strategy.

Lauren Taylor – Ms. Talyor advised that her comments had been covered and ceded her time.

Susan Gitlin – Ms. Gitlin commented that she is from Rockbridge County and has been studying and addressing invasive species for fifteen years. She noted that the list becomes out of date very quickly and asked the work group to consider how it could be updated on a more regular basis.

Paige Thacker – Ms. Thacker noted that she works with Virginia Cooperative Extension in Prince William County. She works with Virginia Tech and Virginia State supervising master gardeners and naturalists. She advised that VCE would be interested in working with the group as it moves forward.

Dan Holmes – Mr. Holmes is the Director of State Policy for the Piedmont Environmental Council. He expressed his support for the legislation. He echoed the comments of Ms. Gitlin stating the need for routine updates to the list.

NEXT MEETING

Mr. Burrell thanked members and guests for their participation.

The next meeting is scheduled for July 14, 2021 at 10:00 a.m. Meeting details will be provided.

The meeting was adjourned.

CHAT LOG:

The following additional comments were recorded in the meeting chat log:

Marion Lobstein (to Everyone): 11:14 AM: The Flora of Virginia App was updated in Dec. 2020 and the total number of Virginia vascular plant species covered in the Flora of Virginia Project is now approximately 3350 species.

Marion Lobstein (to Everyone): 11:17 AM: The last chat entry on the updated number of vascular plant species was entered by Marion Lobstein, Vice-president Foundation of the Flora of Virginia Project

Jason Powell (to Everyone): 11:38 AM: With respect to the observation on funding, will the workgroup be able to frame its recommendations in terms of the order of magnitude of cost with respect to relative benefit of the approach? For example, is it more cost effective to fund public land control efforts v. private landowner grants. If landowner grants are recommended, how would you quantify the outcomes and ensure compliance.

Clyde Cristman (to Everyone): 11:41 AM: Jason, good point. We should certainly consider cost-benefit analysis and a discussion of public vs private lands. For private lands, the best approach would likely be a reimbursement program to ensure that was successfully completed before reimbursement.

Flanagan, Julia (to Everyone): 11:41 AM: We need law to prevent the sale of non-native invasives. Education is good, but it will not affect the majority of purchasers. I think most consumers of plants will remain ignorant of the issue.

Luke Peters (to Everyone): 11:51 AM: Basically the rest of what I wanted to say was we should be starting to create a regulatory environment that would incentivize companies to come up with creative solutions to not just the agricultural-impacting invasives. Things like species-specific herbicides, novel "bio-weapons", etc. I'm sure VA Tech and others would be happy to hop on to that. Also +1 to the dedicated funding vehicle.