

Appendix M. Recommendations for Education and Outreach Actions

Jeff Trollinger, DGIF Watchable Wildlife Program Manager, coordinated an effort to elaborate on recommendations from the ESC, community meetings, and TACs. These were recommendations of actions either needed to preserve the SGCN and their habitats or areas within the realm of conservation that needed improvement. Only the actions with an education and outreach component were provided to Mr. Trollinger. He, his staff, and colleagues in the outreach and education arena of wildlife conservation were given the opportunity to provide more detailed and specific recommendations applicable to these actions. The results are organized by general category, broad recommendations from the committees and the public, then specific recommendations applicable to each recommendation.

Public Education Programs

Recommendation 1: Bring children and adults into contact with and build their understanding of nature.

Existing DGIF programs include:

- Becoming an Outdoors Woman Weekends
- Hunter Education Programs
- Family in the Outdoors
- Mother Daughter Weekends
- Fishing Education Programs
- Landowner Conservation Programs (Landowner Incentive Program, Conservation Reserve Program, etc.)
- Project WILD
- Flying WILD
- Schoolyard Habitat
- Habitat at Home
- Wildlife Viewing Programs (Watchable Wildlife)
- Urban Biology Program (Watchable Wildlife)
- Birding and Wildlife Festivals
- Birding and Wildlife Trail (VBWT)
- WildlifeMapping
- Master Naturalist Program (currently under development in partnership with DOF, Virginia Cooperative Extension, DCR, and the Virginia Museum of Natural History)

Specific Recommendations

1. Continue to expand existing education and outreach programs to inform Virginians about the CWCS and SGCN.
2. Develop a statewide Master Naturalist Program to educate adults about their natural surroundings and bring them in contact with nature and Virginia's natural resources.
3. Incorporate CWCS information into each education and outreach program (e.g. develop lists of SGCN that might benefit from backyard habitat).
4. Develop an agency education working group to coordinate CWCS messages into all education and outreach programs and provide consistent information on SGCN.
5. Develop an interagency education working group to share important CWCS information among agencies and NGOs (TNC, Audubon Society, etc.) and incorporate CWCS information into a variety conservation organizations and local, state and federal agency education and outreach efforts.

Recommendation 2: Connect conservation efforts with economic benefits.

Specific Recommendations

1. Develop a marketing program in partnership with Virginia Tourism Corporation to promote and market the VBWT to local and regional groups to inform them about the economic benefits of tourism associated with conservation of natural resources.
2. Provide technical assistance to landowners and public and private entities to improve access, viewing opportunities, and habitat for attracting visitors and tourism dollars.
3. Promote landowner conservation programs and the economic benefits through tax benefits and/or attracting nature tourism.

Recommendation 3: Increase public interest and support for conservation efforts.

Specific Recommendations

1. Create interagency landowner conservation workshops or enhance existing programs to provide information and technical advice about wildlife habitat improvement and BMPs as they relate to SGCN.
2. Incorporate information about CWCS implementation and SGCN into all current agency education and outreach programs (e.g. mention several SGCN that might benefit from a Habitat at Home or Schoolyard Habitat project as part of a presentation).

Recommendation 4: Inform future decision-makers.

Specific Recommendations

1. Develop workshops for municipal governments, PDCs, and city/county planning commissioners to help them include wildlife and habitat conservation issues as part of their land use planning.
2. Develop workshops for developers to inform them of wildlife and habitat conservation issues.
3. Develop additional urban biology education programs to serve and educate urban/suburban populations.
4. Develop new and enhance existing efforts to form interagency watershed education programs for adults and K-12 students and teachers to address impacts to state aquatic resources.

Collaboration and Partnerships

Recommendation 1: Improve communication among a range of conservation groups.

Recommendation 2: Increase the knowledge base across organizations by sharing information .

Specific Recommendations

1. Develop an interagency education working group to share important CWCS information among agencies and NGOs and incorporate CWCS information into the education and outreach efforts of a variety conservation organizations and local, state, and federal agencies.
2. Develop a statewide Master Naturalist Program, utilizing personnel from all natural resource agencies and NGOs, to educate adults about their natural surroundings and to bring them in contact with nature and Virginia's natural resources.

Research and Knowledge

Recommendation: Disseminate information to the public and decision-makers.

Specific Recommendations

1. Continue to expand existing education and outreach programs to inform Virginians about the CWCS and SGCN.
2. Develop a statewide Master Naturalist Program to educate adults about their natural surroundings and bring them into contact with nature and Virginia's natural resources.
3. Incorporate CWCS information into each education and outreach program (e.g. develop lists of species from CWCS that might benefit from backyard habitat).
4. Develop an agency education working group to coordinate CWCS messages into all education and outreach programs and provide consistent information on SGCN.
5. Develop an interagency education working group to share important CWCS information among agencies and NGOs and incorporate CWCS information into a variety conservation organizations and local, state and federal agency education and outreach efforts.
6. Develop mechanisms to inform and educate the public about ongoing research on and conservations needs of Virginia's wildlife resources and SGCN.

Conservation Organizations

Recommendation: Offer ways for local people to get involved in effective conservation projects.

Specific Recommendations

1. Develop a statewide Master Naturalist Program, utilizing personnel from all natural resource agencies and NGOs, to educate adults about their natural surroundings and bring them into contact with nature and Virginia's natural resources.
2. Enhance and expand the WildlifeMapping Program to provide individuals and local community groups with the resources to do community-based research and projects that benefit wildlife in their area.
3. Create interagency landowner conservation workshops or enhance existing programs to provide information and technical advice about wildlife habitat improvement and BMPs as they relate to SGCN.
4. Provide technical assistance to landowners and public and private entities to improve access, viewing opportunities and habitat for attracting visitors and tourism dollars.
5. Promote landowner conservation programs and the economic benefits through tax benefits and/or attracting nature tourism.

Laws and Regulations

Recommendation: Educate the public about environmental laws.

Specific Recommendation

Develop and enhance materials that explain wildlife laws and regulations to the public and distribute them through DGIF and other natural resource education and outreach programs.

Public Access and Use

Recommendation 1: Offer hands-on educational programs and opportunities.

Recommendation 2: Provide direct contact with habitats and wildlife.

Recommendation 3: Make resources readily available for use.

Specific Recommendations

1. Develop a statewide Master Naturalist Program, utilizing personnel from all natural resource agencies and NGOs, to educate adults about their natural surroundings and bring them into contact with nature and Virginia's natural resources.
2. Enhance and expand the WildlifeMapping Program to provide individuals and local community groups with the resources to do community-based research and projects that benefit natural resources in their area.
3. Create interagency landowner conservation workshops or enhance existing programs to provide information and technical advice about wildlife habitat improvement and BMPs as they relate to SGCN.
4. Provide technical assistance to landowners and public and private entities to improve access, viewing opportunities, and habitat for attracting visitors and tourism dollars.
5. Develop trails, wildlife viewing structures, interpretive signage and additional access to DGIF wildlife management areas, VBWT sites, other public lands, and available private lands to enhance the public's understanding and access to natural environments.
6. Market the VBWT in cooperation with the Virginia Tourism Corporation to make the public aware of the best places to view wildlife.

Funding to Support Programs

Recommendation: People fund projects in which they are involved.

Specific Recommendations

1. Develop and enhance materials to incorporate into all DGIF education and outreach programs that explain the importance of funding wildlife conservation programs.
2. Find new and innovative funding mechanisms and market existing funding mechanisms that provide a source of revenue from esthetically oriented wildlife users.

Coordination and Working Partnerships

Recommendation 1: Create a "one-stop shop" to assist landowners with conservation efforts and decrease response time when information or assistance is requested.

Specific Recommendations

1. Develop and enhance existing Web-based materials to provide information to landowners and the general public that provide immediate answers to common questions and concerns.
2. Develop an intra-agency education working group to coordinate CWCS messages and landowner assistance resources into all education and outreach programs.
3. Develop an interagency education working group to share important CWCS information and landowner resources among agencies and NGOs and incorporate CWCS information into a variety conservation organizations and local, state and federal agency education and outreach efforts.

Recommendation 2: Host forums to bring agencies, organizations and interested citizens together to discuss and address issues.

Specific Recommendations

1. Develop an intra-agency education working group to coordinate CWCS messages and landowner assistance resources into all education and outreach programs.

2. Develop an interagency education working group to share important CWCS information and landowner resources among agencies and NGOs and incorporate CWCS information into a variety conservation organizations and local, state and federal agency education and outreach efforts.

Recommendation 3: Increase industry partnerships.

Specific Recommendations

1. Develop new and enhance existing programs that partner with industry to provide education, outreach and wildlife viewing opportunities to citizens.
2. Research corporate and industry grant and sponsorship opportunities for a variety of education and outreach programs (e.g. Exxon-Mobil grants for Master Naturalist Program, corporate sponsorships for wildlife viewing structures, etc.).

Recommendation 4: Link terrestrial and marine conservation efforts.

Recommendation 5: Partner with local governments and provide technical assistance.

Local and Regional Land Use Planning and Development Standards

Recommendation: Educate local decision-makers on best practices

Specific Recommendations

1. Develop workshops for municipal governments, PDCs, and city/county planning commissioners to help them include wildlife and habitat conservation issues as part of their land use planning.
2. Develop workshops for developers to inform them of wildlife and habitat conservation issues.

Public Education and Awareness

Recommendation 1: Conduct educational workshops for youth and adults to improve environmental understanding.

Recommendation 2: Create an Education Coordinator at the state level to coordinate outreach activities.

Recommendation 3: Create statewide multi-media marketing campaigns to make it “cool” to conserve and to communicate the value and benefits of conservation efforts.

Recommendation 4: Increase wildlife education curriculum in schools and tie to the Standards of Learning.

Recommendation 5: Inform the public about how they can get involved in their community with land development decision-making and conservation efforts.

Recommendation 6: Inform the public about the economic and health benefits of conservation.

Recommendation 7: Prepare educational materials for political decision-makers.

Recommendation 8: Prepare publications for the general public to increase understanding about how to protect and improve water quality, habitat and wildlife diversity.

Recommendation 9: Produce a resource directory listing conservation-related agencies, programs and local contact information and distribute it to the public and post it on the Internet.

Recommendation 10: Utilize outdoor recreation providers as conservation educators.

Specific Recommendations

1. Continue to expand existing education and outreach programs to inform Virginians about the CWCS and SGCN.
2. Develop a statewide Master Naturalist Program to educate adults about their natural surroundings and bring them into contact with nature and Virginia's natural resources.
3. Incorporate CWCS information into each education and outreach program (e.g. develop lists of species from CWCS that might benefit from backyard habitat).

4. Develop an intra-agency education working group to coordinate CWCS messages into all education and outreach programs and provide consistent information on SGCN.
5. Develop an interagency education working group to share important CWCS information among agencies and NGOs and incorporate CWCS information into a variety conservation organizations and local, state and federal agency education and outreach efforts.
6. Develop and enhance existing Web-based materials to provide information to landowners and the general public that provide immediate answers to common questions and concerns.
7. Enhance and expand the WildlifeMapping Program to provide individuals and local community groups with resources to do community-based research and projects that benefit natural resources in their area.
8. Create interagency landowner conservation workshops or enhance existing programs to provide information and technical advice about wildlife habitat improvement and BMPs as they relate to SGCN.
9. Provide technical assistance to landowners and public and private entities to improve access, viewing opportunities, and habitat for attracting visitors and tourism dollars.
10. Develop trails, wildlife viewing structures, interpretive signage, and additional access to DGIF wildlife management areas, VBWT sites, other public lands, and available private lands to enhance the public's understanding and access to natural environments.
11. Develop and enhance materials to incorporate into all DGIF education and outreach programs that explain the importance of funding wildlife conservation programs to generate revenue for statewide initiatives (Environmental Education Coordinator, marketing campaigns, etc.).
12. Find new and innovative funding mechanisms and market existing funding mechanisms that provide a source of revenue from aesthetically-oriented wildlife users to generate revenue for statewide initiatives (Environmental Education Coordinator, marketing campaigns, etc.).
13. Enhance and develop materials in coordination with the Virginia Department of Education to develop field-based experiential learning materials and opportunities for K-12 students and teachers that fulfills state Standards of Learning and No Child Left Behind standards.
14. Develop new and enhance existing informational materials and provide them through the Internet to provide information to landowners and the general public that provide immediate answers to common questions and concerns.
15. Better advertise current environmental education workshops and their correlation to the state Standards of Learning and No Child Left Behind.
16. Continue to promote the Virginia Naturally Web site and the associated directory of Natural Resource Agency education and outreach programs.

Habitat Improvement

Recommendation 1: Increase technical assistance to private landowners on methods to manage and improve wildlife habitat.

Specific Recommendations

1. Develop an intra-agency education working group to coordinate CWCS messages and landowner assistance resources into all education and outreach programs.
2. Develop an interagency education working group to share important CWCS information and landowner resources among agencies and NGOs and incorporate CWCS information into a variety conservation organizations and local, state and federal agency education and outreach efforts.
3. Develop and enhance existing Web-based materials to provide information to landowners and the general public that provide immediate answers to common questions and concerns.
4. Create interagency landowner conservation workshops or enhance existing programs to provide information and technical advice about wildlife habitat improvement and BMPs as they relate to SGCN.
5. Provide technical assistance to landowners and public and private entities to improve access, viewing opportunities and habitat for attracting visitors and tourism dollars.
6. Develop a statewide Master Naturalist Program to educate adults about their natural surroundings and bring them into contact with nature and Virginia's natural resources.
7. Provide technical assistance to landowners and public and private entities to improve access, viewing opportunities, and habitat for attracting visitors and tourism dollars.

8. Promote landowner conservation programs and the economic benefits through tax benefits and/or attracting nature tourism.
9. Develop additional urban biology education programs to serve and educate urban/suburban populations.
10. Support and enhance efforts outlined in the Virginia Environmental Education Business Plan to provide every school with an outdoor learning laboratory/habitat over the next 10 years and to enhance development of wildlife habitats on public educational facilities.

Recommendation 2: Promote the use of native landscaping materials through local nurseries.

Specific Recommendations

1. Develop workshops in cooperation with other agency and NGO education and outreach programs, and enhance or continue existing programs that promote the use of native plants in backyard habitat and other wildlife habitat plantings.
2. Develop and hold a statewide workshop on wildlife habitat and native plants in cooperation with other agency and NGO education and outreach programs.

Control of Invasive Species, Plants and Predators

Recommendation 1: Control imports and educate the public on what to look for at nurseries and pet stores.

Recommendation 2: Improve pet control programs to reduce feral dog and cat populations.

Recommendation 3: Use *Virginia Wildlife Magazine* to educate the public about invasive plants and species.

Specific Recommendations

1. Educate the public about environmental laws through the development of new materials and the enhancement of existing handouts.
2. Post materials related to wildlife laws and feral cats and dogs on the Agency Web site and produce articles for Virginia Wildlife related to these topics.
3. Develop additional urban biology education programs to serve and educate urban/suburban populations.
4. Develop an intra-agency education working group to coordinate CWCS messages into all education and outreach programs and provide consistent information on SGCN.
5. Develop an interagency education working group to share important CWCS information among agencies and NGOs and incorporate CWCS information into a variety conservation organizations and local, state and federal agency education and outreach efforts.

Funding for Conservation

- **Recommendation: Increase public lobbying efforts to increase governmental funding.**

Specific Recommendations

1. Develop and enhance materials to incorporate into all DGIF education and outreach programs that explain the importance of funding wildlife conservation programs.
2. Find new and innovative funding mechanisms and market existing funding mechanisms that provide a source of revenue from aesthetically-oriented wildlife users.