

2015 Patuxent River Conference

Small Group Discussion: Black

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Watershed / Upland Species and Habitat

What is the most fundamental scientific question concerning watershed / upland habitat and species that would enhance our understanding of the Patuxent River ecosystem?

Fundamental Question: How do we effectively communicate the connection between land management and the Patuxent River watershed?

There are a variety of effective land management techniques that can be applied to address issues such as erosion, runoff, and nutrient pollution from urban, suburban, and agricultural lands. However, many landowners within the watershed do not fully appreciate how their land management decisions affect the health and economic value of their own land as well as that of streams and the estuary. One potential strategy to address this question might be to utilize applied social and economic research designed to better communicate goals for land management and long-term monitoring. Clear, concise messages must be developed for the public that link land management to the qualities of the river (those being swimmable, fishable, etc). These messages should be coordinated across jurisdictions, as well as across agencies, including the U.S. Department of Agriculture (USDA), Soil and Water Conservation Districts, Maryland Department of the Environment (MDE), NGOs (Non-Governmental Organizations), etc. Decision-makers also need the best available information and messaging so they can create effective policies.

Tidal Species and Habitat

What is the most fundamental scientific question concerning tidal habitat and species that would enhance our understanding of the Patuxent River ecosystem?

Fundamental Question: How do we synthesize long-term monitoring data and apply that data to improve water quality?

There are many good monitoring projects throughout the watershed. However, these efforts are poorly coordinated and the resultant data is not combined and used in an effective way. The data should be synthesized to highlight conclusions and to identify potential gaps that need to be addressed. Monitoring results should be communicated to the general public and decision-makers.

Conservation, Restoration, Management, and Monitoring

What is the most significant conservation, restoration, management, or monitoring strategy that would enhance water quality in the Patuxent River over the next 5 years?

Fundamental Question: How do we make integrated local demonstration projects to show stakeholders of the Patuxent River watershed that effective land management can improve the social and economic value of the land?

A critical gap in some current efforts is that the general public is told what to do, rather than shown examples of effective land management in practice. Local demonstration projects focusing on improving water quality within a few small tributaries of the Patuxent would provide opportunities for jurisdictions to highlight land management options that improve water quality. Observing restoration outcomes and best management practices firsthand may provide land owners with the information they need to take responsible action when issues arise on their own properties. If demonstration projects and monitoring are co-located within small watersheds, the likelihood of documenting improvements due to local land management actions is likely to be greater than for the Patuxent River as a whole. Demonstration projects are also an actionable strategy that could yield positive results within a relatively short timeframe. With effective assessment of restoration strategies and BMPs (Best Management Practices), cost / benefit analyses could be conducted to maximize benefits to farmers, landowners, and the environment.