

Review of State Wildlife Action Plans (SWAPs) and assumptions relevant to Appalachian Landscape Conservation Cooperative's current goal of developing a new portfolio for Science Needs: B. Taggart of USGS collated information from 15 State Wildlife Action Plans to assess which conservation challenges were most widely recognized across the landscape of the Appalachian LCC (AppLCC). These challenges were then further examined by AppLCC staff to discern what conservation Actions were recommended, and these were placed into 6 general categories; frequencies were then calculated for each of these Actions. This qualitative assessment indicates that SWAPs tended to focus their conservation action recommendations on on-the-ground habitat and/or species conservation (e.g. land protection, habitat restoration or enhancement, water quality standards, zoning) with a frequency for this recommendation of 84%. Human dimensions and GIS/data integration or use were each mentioned with a frequency of approximately 20% of the SWAPs. Species biology/natural history information needs were recommended 12% of the time, followed by landscape information needs (4%) and species surveys (2%). This implies that on-the-ground conservation actions were a primary focus of the SWAPs, and further indicates that the AppLCC could serve an important role in exploring more deeply the science support needs necessary to improve efficiency and effectiveness of conservation at landscape scales. See table below for details.

High-Priority Conservation Challenges Summarized from Individual State Wildlife Action Plans ¹

Issue No. Ranked by SWAP Occurrence	High Priority Statewide Wildlife Conservation Challenge ²	CHALLENGES IN SWAPS DIVIDED INTO RECOMMENDED ACTION CATEGORIES						# of States per Issue ³	List of States ³	Total States per Issue ⁴
		84%	22%	21%	12%	4%	2%			
		Specific On-the-Ground Conservation Action Recommended	Human Dimensions Research /Surveys	Geographic Data Integration /Development	Species Biology Information Need	Landscape Information Need	Coordinated Large-Scale Species Surveys			
1	Habitat Loss and Degradation	X	X	X		X		12	AL, CT, GA, IL, IN, KY, MA, MD, NC, NJ, NY, OH	15
2	Habitat Fragmentation		X	X		X		12	AL, CT, GA, IL, IN, KY, MA, MD, NC, NJ, NY, OH	12
3	Land-Use Changes (agriculture, fire regimes, etc.)	X	X	X				11	CT, GA, IL, IN, KY, MD, NC, NJ, OH, SC, TN	11
4	Habitat Changes Due to Industrial & Municipal Development	X		X	X	X		11	AL, IN, KY, MA, NJ, NY, OH, PA, TN, VA, WV	11
5	Invasive and Nonnative Species	X		X			X	11	AL, CT, GA, IL, IN, KY, MA, MD, NC, NJ, NY	11
6	Lack of Knowledge About Priority Species				X			8	CT, MA, NJ, OH, TN, PA, SC, WV	8
7	Instream Flow Alterations (water usage)	X			X	X		6	GA, KY, MA, MD, NC, PA	6
8	Dam and Impoundment Construction	X		X		X		5	AL, GA, NC, VA, WV	8
9	Water Quality	X			X			3	NJ, NY, PA	3
10	Wildlife Diseases							2	OH, SC	2
11	Atmospheric Acid Deposition	X						1	WV	1
12	Climate Change				X	X		1	IN	1

¹ This table compiled from information contained in the individual state Wildlife Action Plan summary fact sheets available at <http://www.wildlifeactionplans.org/> in April 2011. Each issue listed in this table was specifically mentioned as a primary conservation challenge in the state fact sheets attributed to it.

² An attempt has been made by the compiler to associate related challenge issues by indenting related sub-issues underneath the broader issue.

³ States in which this is specifically identified as a statewide high-priority issue.

⁴ States in which this is an important issue, but not specifically selected as a high-priority issue.

High-Priority Conservation Challenges Summarized from Individual State Wildlife Action Plans ¹

Frequency This Action Recommended/Implied	CHALLENGES IN SWAPS DIVIDED INTO RECOMMENDED ACTION CATEGORIES						# of States per Issue ³	Total States per Issue ⁴
	84%	22%	21%	12%	4%	2%		
High Priority Statewide Wildlife Conservation Challenge	Specific On-the-Ground Conservation Action Recommended	Human Dimensions Research/Surveys	Geographic Data Integration/Development	Species Biology Information Need	Landscape Information Need	Coordinated Large-Scale Species Surveys		
Habitat Loss and Degradation	X	X	X		X		12	15
Habitat Fragmentation		X	X		X		12	12
invasive and Nonnative Species	X		X			X	11	11
Lack of Knowledge About Priority Species				X			4	4
Wildlife Diseases							2	2
Habitat Changes Due to Industrial & Municipal Development	X		X	X	X		8	10
Dam and Impoundment Construction	X		X		X		6	8
Instream Flow Alterations (water usage)	X			X	X		6	6
Water Quality	X			X			3	3
Land-Use Changes (agriculture, fire regimes, etc.)	X	X	X				6	11
Atmospheric Acid Deposition	X						1	1
Climate Change							1	1

¹ This table compiled from information contained in the individual state Wildlife Action Plan summary fact sheets available at <http://www.wildlifeactionplans.org/> in April 2011.

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