	A	В	С	D	E	F	G	Н	L	Р	Т	U	V
										Threat Long	Actions	Working Lands	Notes
1	Scientific Name	Common Name	Grounin	o Tyne	Tier	COR	Habitats	Threat Code	Threat Description	Inicat_Long		Working_Lanus	
<u> </u>	Scientine_Name	Common_Name	oroupin	5 Type		oon	Tabitats	Threat_oode	Inteat_bescription	Majar abandas in an assaultan resulting in	Habitat protection is peeded. Cooperation and education of land owners should be high priority	Dreade in weedland erece neer	Dursue better understanding of factors relating to recruitment
										Major changes in an ecosystem resulting in	Habitat protection is needed. Cooperation and education of land owners should be high priority	Breeds in woodland areas near	Pursue better understanding of factors relating to recruitment
										changes to vegetation communities distinguished	conservation methods. This includes both breeding and wintering habitats. (11.1.1), Pursue	moist or wet areas. Forage in dry	and nest survival, including nest predation, nest predators and
										from natural vegetation succession, which may	proper and directed (appropriate) forest management. Forest management needs to include	fields, agricultural fields, bottom	potential ways to improve nest survival. Recruitment appears to
										threaten open-country species (Threat 7.3.2). E.g.,	more diverse management to include early to mid-successional forest (habitat) stages interspersed	land and other upland fields .	be a limiting factor - if nesting/brood rearing habitat is what is
										migration of deciduous trees towards the boreal	with other successional stages. Not enough cutting (management) is practiced on many federal		limiting recruitment, this habitat type should be a major focus of
										forest rising sea levels desertification thawing	forests/lands. (5.3)		active management.
										normafrast (in tundra), garal bloaching			
										permanost (in tunura), corat bleaching. 7			
										Harvesting trees/other forest species in natural			
										environments for timber or fiber outside of			
										plantations (Threat 2.2). Includes cutting and the			
										use of machinery, as well as wood storage and			
										debris management, excluding their transport			
							Forosts and Woodlands			(Threat 4.1) and acception denotion (Threat 0.2) (
										(Initeat 4.1) and associated erosion (Initeat 9.3)			
							Grasslands, Shrublands,						
							Savannas, Glades and Barrens,		Changes in Vegetation Communities /				
2	Scolopax minor	American Woodcock	Bird	Bird	1 6	a	Riparian and Floodplains,	11.1.1, 5.3,	Logging and Wood Harvesting /				
										11	Collect additional data on the breeding distribution. Pursue collection of ecological and		Collect additional data on the breeding distribution of what is
											reproductive data in Virginia.		thought to be a relatively small population of this range-restricted
											· · · · · · · · · · · · · · · · · · ·		subspecies in Virginia, expanding upon data from the 2nd Virginia
													Subspecies in virginia, expanding upon data nom the zna virginia
													Breeding Bird Atlas, eBird reports and other previous survey
													efforts. Pursue collection of ecological and reproductive data in
													Virginia, as well as data on migratory connectivity (where within
1													eastern United States does Virginia's Appalachian Winter Wren
1													winter) and winter ecology, as a path toward investigating
								N : 4 - : - : : 4 : 4					geographic and temporal extent of limiting factors.
								No specific identified					
							Forests and Woodlands, Boreal	threats, see notes for					
3	Troglodytes hiemalis	Appalachian Winter Wr	en Bird	Bird	III	c	Forests	more information,	11				
										11	Explore the possibility of reintroducing the species to Virginia, where it was last documented in		Explore the possibility of reintroducing the species to Virginia,
											2002.		where it was last documented in 2002, targeting stable mature
								No specific identified					pine sayannah habitats such as those found at TNC's Piney Grove
								throate, and notes for					Preserve and DWR's Big Woods Wildlife Management Area
			D . 1					tilleats, see notes for					
4	Peucaea aestivalis	Bachman's Sparrow	Bird	Bird		a	Forests and Woodlands	more information,	//				
										11	Compile existing data and pursue targeted surveys in order to identify large/important colony sites	Nests in vertical banks, cliffs, and	The reasons for declines are not well understood, and better
											Pursue collection of ecological and reproductive data in Virginia, as well as data on migratory	bluffs along rivers, streams, lakes,	information on abundance and distribution are necessary.
											connectivity via coordinated multi-state projects.	and coastal shorelines as well as	Compile existing data and pursue targeted surveys in order to
												in in artificial sites such as sand	identify large/important colony sites. Pursue collection of
													ecological and reproductive data in Virginia, as well as data on
												and gravel quarries and road cuts.	migratory connectivity via coordinated multi state projects
												Foraging habitats surrounding	migratory connectivity via coordinated mattri state projects.
												nesting colony may include	
												wetlands, open water, grasslands,	
							Grasslands, Shrublands, Glades					riparian woodlands, agricultural	
							and Barrens Binarian and	No specific identified				areas and shrublands	
							Eloodalaine Shorolinee Artificial	throate soo notos for				areas, and smustands.	
-	Pinorio rinorio	Popk Swellow	D:	D:		h	Impoundments Miss-	moro information					
5	прана прана	Dalik Swallow	BILO	BILO		N	impoundments, Mines	more mormation,	11				
1										Crops that are associated with less intensive	Create/maintain fallow pastures through CRP and CREP programs (2.1.2), Promote conservation	Nests in barns, silos duck blinds,	
1										agricultural practices that have less of an	and agricultural land easements, agricultural subsidy programs, and local land use planning efforts	abandoned building, nest boxes	
										ecological impact than do annual crops. E.g	to mitigate development impacts (1.1.1), Research the impacts of neonicotinoids on prey base and	church steeples, natural cavities in	
										nastures forage crops hav alfalfa clover /	impact on Barn Owl health/mortality (9.3.3)	trees cliffs and quarries	
										Madium to high donaity doualarment for		a soo, cano, ana quantos.	
										reduum to high-density development for			
1										residential use and buildings for related services.			
1										Allows very little to no maintenance of ecological			
										functions. E.g., urban areas, suburbs, villages,			
										schools, libraries, seniors' housing, hospitals /			
1							Forests and Woodlands			Includes the use of inputs for controlling crop			
							Grasslands Gladas and Parrans		Peronnial Cronning Systems / Dance	note E a horbioidos insectisidos fundicida-			
1							Tide Mathemate		Lauring and Links (11, 11, 11, 11, 11, 11, 11, 11, 11, 11	pesis, e.g., nervicides, insecticides, tungicides.			
1							nual wetlands, Urban Lands,		nousing and Urban Areas / Herbicides				
6	Tyto alba	Barn Owl	Bird	Bird	<u> </u> i	a	Mines	2.1.2, 1.1.1, 9.3.3	and Pesticides				
1										11	Investigation of migratory status and additional life history information of Virginia's Belted	Breeds in vertical earthen banks	The reasons for declines are not well-understood. Pursue the
1											Kingfisher. collection of ecological and reproductive data; Investigate the relative use of nesting	along ponds, lakes, rivers, streams	following: 1. investigation of migratory status of Virginia's Belted
1											substrates that are natural (ex. riparian earthen banks) vs artificial (ex. road cuts, landfills. sand	and calm marine waters, but may	Kingfisher, which may be partial migrants, to determine whether
											and gravel pits)	also post in artificial habitats	potential threats should be investigated on wintering grounds
												including ditabases	outside of Virginia: 2. identification of essential resources during
												including ditches, road cuts,	winter: 3 collection of ecological and rongoductive data: 4
												landfills, and sand and gravel pits.	winter, 5. collection of ecological and reproductive data; 4.
												Feeds in waters with low turbidity.	relative use of nesting substrates that are natural (ex. riparian
1							Riparian and Floodplains.						earthen banks) vs artificial (ex. road cuts, landfills, sand and
1							Shorelines Transportation	No specific identified					gravel pits) and whether the latter represent population sinks.
							Notucito Artifici-1	threate and starter					
1							Networks, Artificial	threats, see notes for					
7	Megaceryle alcyon	Belted Kingfisher	Bird	Bird	111	b	Impoundments, Mines	more information,	11				

1	A	В	С	D	E	F	G	Н	L	Р	Т	U	V
										Threat_Long	Actions	Working_Lands	Notes
1	Scientific_Name	Common_Name	Grouping	g Type	Tier	COR	Habitats	Threat_Code	Threat_Description	Extensive development that is residential (including	Continue supporting the work of the Eastern Shore Conservation Alliance to address the needs of	During migration in coastal Virginia,	
										resorts), where the spacing allows ecological	migratory passerines, including Bicknell's Thrush, through protection and management of stopover habitat along the species' migratory routes in Accomack and Northampton counties, ensuring that	it is associated with upland shrub	
										development is seen particularly in rural and	the Alliance is taking the species' specific habitat requirements into account. (1.1.2, 7.3.2)	by loblolly pine, various oaks, wax	
										agroforestry areas. E.g., residential buildings in		myrtle and old field habitat, though	
										agricultural areas, cottages, vacation homes near		it is also documented in forested	
										water bodies, ecotourism lodges, fishing resorts,		suburban habitat.	
										backcountry ski lodges. / Natural vegetation			
							Forests and Woodlots,			successional habitats. /			
		Bicknell's Thrush					Shrublands, Beaches and Dunes,		Low-Density Housing Areas /				
8	Catharus bicknelli	(transient)	Bird	Bird	IV	а	Urban Lands	1.1.2, 7.3.2,	Vegetation Succession /				
										Major changes in an ecosystem resulting in	Address impacts of sea level rise as follows: 1. purchase and conserve properties in marsh		Other potential threats for which no achievable actions have been identified: 7.3.1.8.1.1.8.2.5.11.2.2.11.4.2.11.5.2.
										from natural vegetation succession, which may	Rail (BLRA) breeding habitat and manage and monitor these properties for BLRA once the		<u>identified</u> , 7.5.1, 0.1.1, 0.2.5, 11.2.2, 11.4.2, 11.5.2,
										threaten open-country species (Threat 7.3.2). E.g.,	transformation has occurred. 2. Using Doe Creek WMA as a model, integrate the creation and		
										migration of deciduous trees towards the boreal	maintenance of suitable BLRA breeding habitat in DWR-owned coastal impoundments'		
										forest, rising sea levels, desertification, thawing	3. Encourage managers of privately-owned coastal impoundments to engage in BLRA breeding		
										permatrost (in tundra), coral bleaching. / / e.g.,	habitat management through conservation easements and NRCS funding. 4. Conduct regular BLRA		
										closion of shoreanes, bedenes during storms.	occupancy and breeding productivity monitoring in coastal impoundments that are managed for		
											BLRA to evaluate the effectiveness of the impoundment management strategies over time.	4	
											other invasive plant species at coastal DWR WMAs with suitable BLRA breeding habitat. (8.1.4), 1.	* 	
											Develop, secure funding for and implement a pilot project involving thin layer deposition of dredge		
											material obtained from local navigational channels to increase the elevation of Chesapeake Bay		
											 Evaluate the effectiveness of this marsh restoration technique and its impacts on the marsh 		
											hydrology and plant and wildlife communities over the long term. (11.5.2)		
							Shorelines, Tidal wetlands,		Changes in Vegetation Communities /				
9	Laterallus jamaicensis	Black Rail	Bird	Bird	I.	а	Artificial Impoundments	11.1.1, 8.1.4, 11.5.2	Aquatic Plants / Storm Surges				
										/ e.g., ranavirus in amphibians, rabies in raccoons.	Address potential impacts to Black Skimmer (BLSK) prey as follows: 1. Continue to participate in	Nests sandy beaches on the barrier	Address potential impacts to Black Skimmer (BLSK) prey as
										/ industrial parks, manufacturing plants, offices,	regional and coastwide breeding BLSK diet studies using a variety of techniques (e.g., stable isotopic applying DNA applying to access how	islands and Chesapeake Bay	follows: 1. Continue to participate in regional and coastwide
										shopping centers, all military base facilities, power	shifts in the distribution of forage fish driven by climate change influences the diet of piscivorous	Islands. Also nests on artificial	stable isotope analyses, DNA analyses on fecal samples, visual
											seabirds over time. NOTE: In the future, we plan to expand these diet studies to include other	Roads area adjacent to a major	observations of foraging behavior) to assess how shifts in the
											seabird species such as Gull-billed Tern, Least Tern and Royal Tern. (11.2.2), 1. Develop a rapid	instate highway, and occasionally	distribution of forage fish driven by climate change influences the
											mortality/morbidity events that occur during the breeding season. NOTE: this action is intended fo	on shell rakes at the edges of salt	plan to expand these diet studies to include other seabird species
											all seabird species that breed in Virginia. (8.4.2), For populations nesting in urban areas: 1.	marshes in the seaside lagoon	such as Gull-billed Tern, Least Tern and Royal Tern. (11.3.3, 11.3.4)
											Continue to monitor, manage and maintain the temporary nesting habitat used by BLSK on barges	waters close to the shoreline, and	
											adjacent to the Hampton Roads Bridge-Lunnel (HRBL) until the construction of a new nesting Island has been completed 2. Track the annual number of pairs and breeding success of BLSK (and other	in tidal waters of coastal bays,	
											seabird species) utilizing the new nesting island which will be located in the vicinity of the HRBT. 3.	estuaries, rivers, and saltmarsh	
							Sharalinos, Boachos and Dunos				Maintain suitable breeding habitat and provide sufficient law enforcement protection for breeding	tidal pools.	
							Large Tidal Rivers, Tidal				BLSK and other seabird species on the new nesting island over the long term. (1.2.1)		
							Wetlands, Estuaries, Marine						
10	Punchons nigor	Black Skimmor	Bird	Bird		2	Nearshore, Urban Lands,	11 2 2 8 4 2 1 2 1	Changes in salinity / Viral Pathogens /				
10		DUCK OKIMINCI	Dilu	Dird		u		11.2.2, 0.4.2, 1.2.1		Extensive development that is residential (including	Though it is characterized as a generalist with broad habitat tolerances, the species is potentially		The reasons for declines are not completely understood. Pursue
1										resorts), where the spacing allows ecological	sensitive to forest fragmentation, which can result via the identified threats. Investigate the		collection of ecological and reproductive data in Virginia, as well
1										functions to continue to some extent. This type of	species' sensitivity to forest fragmentation and/or work to retain large forest blocks via multiple		as data on migratory connectivity via coordinated multi-state
1										development is seen particularly in rural and	(1.1.2, 4.2.1, 4.2.2, 5.3.1)		extent of limiting factors.
1										agroundestry areas. E.g., residential buildings in agricultural areas, cottages, vacation homes near	, ,,		
1										water bodies, ecotourism lodges, fishing resorts,			
1										backcountry ski lodges. / Linear networks for			
1										transportation energy and various resources,			
1										electrocution barrier to dispersal babitat			
1										modification/loss, fatal collisions. / Cutting			
1										removing the majority of the forest cover. E.g., clear	r-		
1										cutting and related cuts (CT, CRS, CPRS, CPHRS,			
1									Low-Density Housing Areas / Litility	CPPIM).			
1									and Service Lines / Complete Remova	ı			
11	Mniotilta varia	Black-and-white Warb	oler Bird	Bird	IV	b	Forests and Woodlands	1.1.2, 4.2, 5.3.1	of the Forest Cover				

	A	В	C	D	E	F	G	н	L	Р	Т	U	V
										Threat_Long	Actions	Working_Lands	Notes
1	Scientific_Name	Common_Name	Grouping	Туре	Tier	COR	Habitats	Threat_Code	Threat_Description			<u>u</u> _ 1 1 1	
										Major changes in an ecosystem resulting in	Address impacts of sea level rise as follows: 1. Increase the elevation of mudflats used by foraging	Wintering birds use tidal creeks.	Other potential threats for which no achievable actions have been
										changes to vegetation communities distinguished	and roosting Black-bellied Plover (BBPL) that are in danger of being lost to sea level rise through	estuaries lagoons and shorelines	identified: 7.3.3: 8.1.1 (introduced PEFA impacts): 8.4.2: 9.2.1:
										from natural vegetation succession which may	the thin layer deposition of dredge material obtained from adjacent navigational channels. 2.	where they feed on mudflats and	11.4.2 (drought impacts on prey availability); 11.2.2 (salinity shift
										threaten open-country species (Threat 7.3.2) E g	Evaluate the effectiveness of this technique by conducting before and after shorebird surveys to	beaches. They often use nearby	impacts on prey); 11.3.3 temp change impacts on prey); 11.5.2
										migration of deciduous trace towards the barrel	quantify differences in shorebird use and by conducting before and after benthic invertebrate	agricultural fields as well	
										fingration of deciduous trees towards the poreat	surveys and sampling to measure differences in prev types, density and availability. 3. Enhance and	agricultural netus as well,	
										forest, rising sea levels, desertification, thawing	increase BBPL roosting habitat in the seaside marshes by increasing the elevation and footprint of	especially during high tides, when	
							Shorelines, Beaches and Dunes,			permafrost (in tundra), coral bleaching. / /	eroding shell rakes (11.1.1)	mudflats are underwater.	
		Black-bellied Plover					Tidal Creeks and Rivers, Tidal		Changes in Vegetation Communities /		eroung shen takes. (11.1.1)		
12	Pluvialis squatarola	(winter)	Bird	Bird	IV	а	Wetlands	11.1.1	/				
										Major changes in an ecosystem resulting in	Conduct the following activities for higher-tiered, marsh-nesting avian SGCN, which would in turn	Breed in freshwater and salt	Conduct periodic monitoring (ex. every 5-10 years) at a network of
										changes to vegetation communities distinguished	benefit marsh-nesting populations of Boat-tailed Grackle threatened by sea level rise: 1. purchase	marshes and adjacent open upland	sites to evaluate population trend/stability
										from natural vegetation succession, which may	and conserve properties in marsh migration zones where upland habitats have a high probablity of	habitats in coastal Virginia. Forages	
										threaten open-country species (Threat 7.3.2), E.g.,	transforming into suitable breeding habitat. 2. Manage coastal WMAs that encompass suitable	over wide range of habitats, from	
										migration of deciduous trees towards the boreal	marsh habitats for breeding marsh birds. 3. Monitor as part of regular secretive marsh bird	city streets and plazas to cultivated	
										forest rising sea levels desortification thawing	occupancy and breeding productivity monitoring on DWR WMAs that are managed for marsh-	fields open beaches and marshes	
										normafrast (in tundra), asral blasshing //	nesting birds to evaluate the effectiveness of management strategies. (11.1.1)	netus, open beaches, and marshes.	
										permanosi (in tunura), corat bleaching. 77			
							Beaches and Dunes, Tidal		Changes in Vegetation Communities /				
13	Quiscalus major	Boat-tailed Grackle	Bird	Bird	111	а	Wetlands, Urban Lands	11.1.1	/				
										Crops that are associated with less intensive	Coordinate with and support expansion of programs such as the Virginia Grassland Bird Initiative,	Breeds in hayfields, meadows,	The reasons for declines are not completely understood. Pursue
										agricultural practices that have less of an	which conduct research and provide financial incentives to private landowners to adopt BMPs to	marshes, and fallow fields.	collection of ecological and reproductive data in Virginia; expand
										ecological impact than do annual crops. E.g.,	improve grassland bird productivity (2.1.2), Research the impacts of pesticides on prey base and		upon existing studies to determine migratory connectivity for
										pastures, forage crops, hay, alfalfa, clover. /	impact on grassland bird communities (9.3.3)		Virginia/Appalachian populations; investigate threats on wintering
										Includes the use of inputs for controlling crop			grounds (including degree of population reduction through pest
									Perennial Cropping Systems /	nests E g herhicides insecticides fungicides /			control programs such as shooting and poisoning)
14	Dolichonyx oryziyorus	Bobolink	Bird	Bird	ш	а	Grasslands	2.1.2.9.3.3.	Herbicides and Pesticides /				
	Douchonyx oryzivorus	Dobotiint	Dira	Diru		u	orussiunus	2.1.2, 0.0.0,		Construction and maintenance of channels that	Restoration of drained wetland babitats for agricultural use to promote water quality and		
											improvement of CAV feed recourses (7.2.4). Restoration of drained ferested water quality and		
										drain surface waters in agricultural environments.	improvement of SAV food resouces. (7.2.4), Restoration of drained forested wetlands to promote		
										Excludes the use/management of culverts (Threat	water quality and improvement of SAV food resouces. (7.2.5)		
										7.2.3). Excludes erosion/sedimentation that are			
										associated with the drainage system (Threat			
										9.3.2). / Construction and maintenance of			
										channels that drain surface waters in forest			
										environments. Excludes erosion/sedimentation			
										that is associated with this drainage system (Threat			
							Shorelines Large Tidal Rivers		Drainage in Agricultural Environments	9.3.2) /			
15	Branta bernicla	Brant (winter)	Bird	Bird		2	Tidal Wetlands	721725	/ Drainage in Forest Environments /	3.3.2). /			
	branta bernicia	branc (whiter)	Diru	Diru		u	nual Wettanus	7.2.4, 7.2.3,	/ Drainage int orest Environments /	Harvasting trace (ather forget appaids in patural	The Canada Warbler Full life cycle Concernation Action Plan identifies forestry practices		The reasons for declines are not completely understood. Bursue
										Harvesting trees/other forest species in natural	The Canada warbier Full-life-cycle Conservation Action Plan identities forestry practices		The reasons for declines are not completely understood. Pursue
										environments for timber or fiber outside of	contributing to sinub layer removal as a major threat laced by this species on the breeding		collection of ecological and reproductive data in virginia, as well
										plantations (Threat 2.2). Includes cutting and the	grounds. This is a suspected, but not known, threat in virginia. Coordinate with the Canada		as data on migratory connectivity via coordinated multi-state
										use of machinery, as well as wood storage and	warbier international conservation initiative on development of regional lorestry Best		projects, as a path toward investigating geographic and temporal
										debris management, excluding their transport	Management Practices (BMPs) for the species as a first step toward addressing this potential		extent of limiting factors. Coordinate with Southern Wings on
										(Threat 4.1) and associated erosion (Threat 9.3) /	(Threat. (5.3)		supporting projects that are generating data on Canada warbier
													In its Central America migration corridor and its Central/South
							Forests and Woodlands, Boreal						America wintering grounds.
16	Cardellina canadensis	Canada Warbler	Bird	Bird	1	b	Forests	5.3	Logging and Wood Harvesting / /				
										Natural vegetation succession causing habitat loss	This is a suspected, but not known, threat. Create/maintain suitable mature forest habitat by		The reasons for declines are not well understood. Support
										for species of early successional habitats. / /	applying Appalachian-specific Cerulean Warbler silvicultural BMPs to create canopy gaps favored		creation of an Integrated Population Model, and pursue collection
											by the species. Pursue application of BMPs through partnerships with the Appalachian Mountains		of additional ecological and reproductive data in Virginia, via
											Joint Venture and others operating via NFWF-funded (and other) grants. (7.3.2)		coordination with the Cerulean Warbler Technical Group. Support
1													Southern Wings projects to collect demographic data on the
1													species' wintering grounds in South America.
	Cotophage conula-	Coruloon Workler	Dire	D:		_	Foront and Mandlend-	722	Vogetation Succession ()				
	octophaga Celutea		DIIU	טווע		d		1.3.2	*C5CIGUUUU SUCCESSIUII / /		Investigate accuracy of chimpays for posting and posting is when your During the start	Broode in obimpous and other	The reacons for declines are not consults to set the
1				1						11	investigate occupancy of chimneys for nesting and roosting in urban areas. Pursue collection of	breeds in chimneys and other	The reasons for declines are not completely understood.
											ecological and reproductive data in virginia, as well as data on migratory connectivity.	artificial structures in urban,	investigate occupancy of chimneys for nesting and roosting in
												suburban and rural areas near	urban areas to determine whether declining availability of
												human settlements. As an aerial	chimneys is a limiting factor. Pursue collection of ecological and
												insectivore, forages over a wide	reproductive data in Virginia, as well as data on migratory
												range of habitats including	connectivity via coordinated multi-state projects, as a path toward
							Forests and Woodlands,					including forests, open country,	investigating geographic and temporal extent of limiting factors.
							Grasslands, Shrublands,	No specific identified				lakes and ponds, suburban areas.	
1							Savannas, Urban Lands Artificial	threats, see notes for				and urban areas	
15	Chaetura pelagica	Chimney Swift	Bird	Bird	N/	h	Impoundments	more information	11				
H	- Shustara petagioa	Stanney Switt	Dird	Bird	1.0	U U	mpoundments	ore intornation,		11	Collaborate with the Atlantic Elyway in its 2024 reinvigoration of the Nightiar Survey Network in		Collaborate with the Atlantic Elyway in its 2024 reinvigoration of
											order to collect better population trend data		the Nightian Survey Network in order to collect better percenter
													the Nightjal Survey Network in order to conect better population
1				1									reacons for declines are not completely understand. During
1				1									reasons for declines are not completely understood. Pursue
1													collection of ecological and reproductive data in Virginia, as well
1													as data on migratory connectivity via coordinated multi-state
1													projects, as a path toward investigating geographic and temporal
1													extent of limiting factors. Research could include investigation of
1				1									habitat characteristics, as well as roadside mortality and insect
1													prey availability as drivers of declines. Coordinate with the
1				1			Forests and Woodlands	No specific identified					Atlantic Flyway on potential upcoming nightjar research projects.
1							Creeslands Christeret	threate and a start for					
17	Antrostomus carolinonsis	Chuck-will's widow	Bird	Bird		h	Savannahs	more information	11				
- 19	CONTRACTION OF CONTRACT OF CONTRACT.	CHICKS WILL SEWILLOW	- CHLU	DILL	1.111	10	Guyannana	THORE HHOLHIGUOIL					

	А	В	C	D	E	F	G	Н	L.	Р	Т	U	V
	Saiantifia Nama	Common Namo	Crouning	Turno	Tior	COR	Habitata	Throat Code	Throat Description	Threat_Long	Actions	Working_Lands	Notes
	ocientino_ivanie	common_warne	Grouping	Type				Intea_Coue	Changes in Vegetation Communities /	Major changes in an ecosystem resulting in changes to vegetation communities distinguished from natural vegetation succession, which may threaten open-country species (Threat 7.3.2). E.g., migration of deciduous trees towards the boreal forest, rising sea levels, desertification, thawing permafrost (in tundra), coral bleaching. //	Conduct the following activities as conservation measures for Clapper Rail (CLRA) marsh habitat threatened by sea level rise: 1. purchase and conserve properties in marsh migration zones where upland habitats have a high probablity of transforming into suitable CLRA breeding habitat. 2. Manage coastal WMAs that encompass suitable marsh habitats for breeding CLRA. 3. Conduct regular CLRA occupancy and breeding productivity monitoring on DWR WMAs that are managed for marsh-nesting birds to evaluate the effectiveness of management strategies. (11.1.1), 1. Improve existing CLRA breeding habitat by conducting regular control of phragmites and other invasive plant species at coastal DWR WMAs with suitable CLRA breeding habitat. (8.1.4)		
20 F	Rallus longirostris	Clapper Rail	Bird	Bird	IV	b	Tidal wetlands	11.1.1, 8.1.4,	Aquatic Plants /	Delikenetek tillinginginginginger of etermeetriet	Further the sele of and see demonstration and see this could recover a	Durada in an an habitata with	
21	Quiscalus quiscula	Common Grackle	Bird	Bird	IV	a	Forests and Woodlands, Urban	515	Management/Control of Terrestrial	believer the second sec	population decline of the species (5.1.5)	Breeds in open nationalist with scattered trees, including open deciduous or coniferous woodland, forest edge and around human settlements including parks, cemeteries and suburban developments	
21	Chardailas minor		Bird	Diru		a b	Forests and Woodlands, Grasslands, Glades and Barrens,	No specific identified threats, see notes for more information		11	Collaborate with the Atlantic Flyway in its 2024 reinvigoration of the Nightjar Survey Network in order to collect better population trend data.	Breeds in open areas such as logged forest, woodland clearings, open forests, barren areas with rocky soil, and flat gravel rooftops in urban areas.	Collaborate with the Atlantic Flyway in its 2024 reinvigoration of the Nightjar Survey Network in order to collect better population trend data for this and other eastern nightjar species. The reasons for declines are not completely understood. Pursue collection of ecological and reproductive data in Virginia, as well as data on migratory connectivity via coordinated multi-state projects, as a path toward investigating geographic and temporal extent of limiting factors. Research could include assessment of the contribution of the loss of gravel rooftops to declines in urban populations; habitat assessments in rural areas; and investigation of insect prey availability as drivers of declines. Coordinate with the Atlantic Flyway on potential upcoming nightjar research projects.
22	Chordeiles minor	Common Nighthawk	Bird	Bird		b	Urban Lands	more information,	//		Address astartial impacts to Common Tarr (COTE) and a fallows 1. Continue to restricte to in	In Mindula, Incometa a set an	1. Continue to most bird along we signs around how mixed encodes
23	Sterna hirundo	Common Tern	Bird	Bird	Π	a	Shorelines, Beaches and Dunes, Large Tidal Rivers, Tidal Wetlands, Estuaries, Marine Nearshore, Urban Lands, Transportation Networks	11.2.2, 11.3.3, 11.3.4	Changes in salinity / Gradual Temperature Change / Increase in Temperature Fluctuations	temperature dependent sex determination, reduction of dissolved oxygen that is available to fish species, earlier ice-free dates, thawing of permafrost affecting bird breeding sites. / Increase in temperature fluctuations, which disturb the phenological responses of wildlife. E.g., raise in the frequency of freeze-thaw events, rain-on-snow events, etc.	regional and coastwide breeding COTE diet studies using a variety of techniques (e.g., stable isotope analyses, DNA analyses on fecal samples, visual observations of foraging behavior) to assess how shifts in the distribution of forage fish driven by climate change influences the diet of piscivorous seabirds over time. NOTE: In the future, we plan to expand these diet studies to include other seabird species such as Gull-billed Tern, Least Tern and Royal Tern. (11.2.2, 11.3.3, 11.3.4)	artifical islands and barges in the Hampton Roads area adjacent to a major interstate. Roosts on beaches, shorelines, mudflats, shellrakes, marinas, docks, and other artifical structures.	seabird colonies that include COTE on the barrier islands (note: this action will benefit <i>all</i> nesting shorebirds and seabirds on the barrier islands). 2. Continue to support and engage in various forms of outreach and education (e.g., printed pamphlets, <i>Explore</i> <i>our Seaside</i> website, presentations, social media) which conveys the importance of the barrier islands to birds and other wildlife and clearly outlines island use policies. 3. Increase the presence of law enforcement and volunteer stewards on the barrier islands, especially during peak island use periods (e.g., weekends and summer holidays) to keep up with the annual increases in the number of people visiting the islands. 4. Expand signage and outreach efforts to sites in the Chesapeake Bay where COTE and seabird species nest (e.g., Clump and Tangier islands). (6), For populations nesting in urban areas: 1. Continue to monitor, manage and maintain the temporary nesting habitat used by COTE on barges adjacent to the Hampton Roads Bridge-Tunnel (HRBT) until the construction of a new nesting island has been completed. 2. Track the aanual number of pairs and breeding success of COTE (and other seabird species) utilizing the new nesting island which will be located in the vicinity of the HRBT. 3. Maintain suitable breeding habitat and provide sufficient law enforcement protection for breeding COTE and other seabird species on the new nesting island over the long term. (1.2.1), Other potential threats for which no achievable actions have been identified: 11.2.2 (salinity impacts on prey); 11.3.3 (temp impacts on prey); 11.5.2; 7.3.3
									Perennial Cropping Systems /	Crops that are associated with less intensive agricultural practices that have less of an ecological impact than do annual crops. E.g., pastures, forage crops, hay, alfalfa, clover. / Includes the use of inputs for controlling crop pests. E.g., herbicides, insecticides, fungicides. /	Coordinate with and support expansion of programs such as the Virginia Grassland Bird Initiative, which conduct research and provide financial incentives to private landowners to adopt BMPs to improve grassland bird productivity (2.1.2), Research the impacts of pesticides on prey base and impact on grassland bird communities (9.3.3)	Breeds in meadows, hayfields of clover, alfalfa or timothy, road sides and fence rows.	The reasons for declines are not completely understood. Pursue collection of ecological and reproductive data in Virginia, as well as data on migratory connectivity via coordinated multi-state projects, as a path toward investigating geographic and temporal extent of limiting factors.
24 5	Spiza americana	Dickcissel	Bird	Bird	П	а	Grasslands	2.1.2, 9.3.3,	Herbicides and Pesticides /				

А	В	C	D	E	F	G	Н	L	р	Т	U	V
									Threat_Long	Actions	Working_Lands	Notes
1 Scientific_Name	Common_Name	Grouping	<u>туре</u>	Tier	COR	Habitats	Threat_Code	Threat_Description				
						Shorelines, Beaches and Dunes, Tidal Wetlands, Large Tidal		Natural Erosion and Sedimentation /	Removal, transport and deposition of sediments that is caused by natural erosional processes. To be distinguished from the transport of sediments that is associated with tides (Threat 4.3.1), or by drainage systems in agriculture (Threat 7.2.5) and forestry (Threat 7.2.6). / Major changes in an ecosystem resulting in changes to vegetation communities distinguished from natural vegetation succession, which may threaten open-country species (Threat 7.3.2). E.g., migration of deciduous trees towards the boreal forest, rising sea levels, desertification, thawing permafrost (in tundra), coral bleaching. /	Address impacts of natural erosion and sea level rise as follows: 1. Enhance existing stopover and wintering habitat by placing beach compatible dredge material along shorelines and on existing or remnant spits and shoals in the seaside barrier island complex and in the Chesapeake Bay. 2. Increase the elevation of mudflats used by foraging Dunlin (DUNL) that are in danger of being lost to sea level rise through the thin layer deposition of dredge material obtained from adjacent navigational channels. 3. Evaluate the effectiveness of action 2 by conducting before and after shorebird surveys to quantify differences in shorebird use and by conducting before and after benthic invertebrate surveys and sampling to measure differences in prey types, density and availability. 4. Enhance and increase DUNL roosting habitat in the seaside marshes by increasing the elevation and footprint of eroding shell rakes. (7.3.3, 11.1.1)	Forage in saltwater areas such as estuaries and lagoons, in wet or flooded farm fields. When the tide is high, they gather on beaches, islands, or the upper edges of marsh. During migration, they stop over in sewage treatment ponds, moist harvested agricultural fields, and muddy edges of farm ponds, rivers, and lakes	Other potential threats for which no achievable actions have been identified: 7.3.3; 9.2.1; 11.4.2 (drought impacts on prey availability); 11.2.2 (salinity shift impacts on prey); 11.3.3 temp change impacts on prey); 11.5.2
25 Calidris alpina hudsonia	Dunlin (winter)	Bird	Bird	IV	а	Rivers, Artificial Impoundments	7.3.3, 11.1.1,	Changes in Vegetation Communities /	,			
						Forests and Woodlands,			Natural vegetation succession causing habitat loss for species of early successional habitats. / /	This is a suspected, but not known, threat. Pursue multiple strategies to ensure adequate supply of early-successional conditions across habitat types to meet reproductive needs of the species. (7.3.2)	Frequently in orchards, pastures, and shrubby borders, forest edges, along fields and highways, near streams with shrubby banks, swamps or marshes with dead stumps and snags, sometimes in open woodlands	The reasons for declines are not completely understood. Pursue collection of ecological and reproductive data in Virginia, as well as data on migratory connectivity via coordinated multi-state projects, as a path toward investigating geographic and temporal extent of limiting factors.
26 Tyrannus tyrannus	Eastern Kingbird	Bird	Bird	IV	а	Shrublands	7.3.2	Vegetation Succession / /			-	
27 Sturnella magna	Eastern Meadowlark	Bird	Bird	IV	b	Grasslands, Transportation Networks	2.1.2, 9.3.3,	Perennial Cropping Systems / Herbicides and Pesticides /	Crops that are associated with less intensive agricultural practices that have less of an ecological impact than do annual crops. E.g., pastures, forage crops, hay, alfalfa, clover. / Includes the use of inputs for controlling crop pests. E.g., herbicides, insecticides, fungicides. /	Coordinate with and support expansion of programs such as the Virginia Grassland Bird Initiative, which conduct research and provide financial incentives to private landowners to adopt BMPs to improve grassland bird productivity (2.1.2), Research the impacts of pesticides on prey base and impact on grassland bird communities (9.3.3)	Breed primarity in pastures and hayfields, but may also use airports, managed grasslands and other grassy areas.	The reasons for declines are not completely understood. Pursue collection of ecological and reproductive data in Virginia, as well as data on migratory connectivity via coordinated multi-state projects, as a path toward investigating geographic and temporal extent of limiting factors.
28. Megascons asin	Fastern Screech-Owl	Bird	Bird	IV	h	Forests and Woodlands, Savannahs, Riparian and Floodnlains, Lichan Lands	111825842	Dense Housing and Urban Areas / Increased Predation by Mesonredators / Viral Pathogens	residential use and buildings for related services. Allows very little to no maintenance of ecological functions. E.g., urban areas, suburbs, villages, schools, libraries, seniors' housing, hospitals / e.g., racoons, striped skunks, foxes, coyotes. / e.g., ranavirus in amphibians, rabies in raccoons.	Research predation by mammalian predators, hawk and owl predation, and nest failure through predation (8.2.5), Coordinate/conduct surveillance of West Nile Virus and Highly Pathogenic Avian Influenza (8.4.2)	sufficient tree cover. Will use farmland, suburban landscapes and city parks.	
	Lastern Screech-Owt	Diru	Diru	IV	0	Titoupianis, orban Lanus	1.1.1, 0.2.3, 0.4.2	nesopredators / virat Patriogens	Natural vegetation succession causing habitat loss	This is a suspected, but not known, threat. Pursue multiple strategies to ensure adequate supply of	:	The reasons for declines are not completely understood. Pursue
29 Pipilo erythrophthalmus	Eastern Towhee	Bird	Bird	IV	а	Forests and Woodlands, Shrublands, Savannas	7.3.2	Vegetation Succession / /	for species of early successional habitats. / /	early-successional conditions across habitat types (regenerating clearcuts, shrubby pastures, right- of-ways, abandoned fields, restored strip mines, vegetated fencerows, etc) to meet reproductive needs of the species. (7.3.2)		collection of ecological (breeding and winter) and reproductive data in Virginia as a path toward investigating geographic and temporal extent of limiting factors.
30 Antrostomus vociferus	Eastern whip-poor-will	Bird	Bird	111	b	Forests and Woodlands, Savannahs	No specific identified threats, see notes for more information,	11		Collaborate with the Atlantic Flyway in its 2024 reinvigoration of the Nightjar Survey Network in order to collect better population trend data.	Breeds in mixed woodlands usually near fields and other open areas.	Collaborate with the Atlantic Flyway in its 2024 reinvigoration of the Nightjar Survey Network in order to collect better population trend data for this and other eastern nightjar species. The reasons for declines are not completely understood. Pursue collection of ecological and reproductive data in Virginia, as well as data on migratory connectivity via coordinated multi-state projects, as a path toward investigating geographic and temporal extent of limiting factors. Research could include investigation of habitat characteristics, as well as roadside mortality and insect prey availability as drivers of declines. Coordinate with the Atlantic Flyway on potential upcoming nightjar research projects.
									e.g., increased grazing by white-tailed deer and	This is a potential, but not known, threat. Investigate impacts of deer browsing on Pewee breeding	Breeds in mature woodlands, urban	The reasons for declines are not completely understood. Pursue
31 Contopus virens	Eastern Wood-Pewee	Bird	Bird	IV	b	Forests and Woodlands, Savannahs	8.2.2, 7.3.2,	Increased Grazing by Vertebrates / Vegetation Succession /	snow geese. / Natural vegetation succession causing habitat loss for species of early successional habitats. /	populations as a function of deer density (8.2.2), This is a suspected, but not known, threat. Pursue multiple strategies to ensure adequate supply of open/edge habitat within forested habitats, as well as the development of forestry Best Management Practices, to meet reproductive needs of the species. (7.3.2)	shade trees, roadsides, woodlots, and orchards. They prefer deciduous forest but also live in open pine woodlands.	collection of ecological and reproductive data in Virginia, as well as data on migratory connectivity to its wintering grounds in South America via coordinated multi-state projects, as a path toward investigating geographic and temporal extent of limiting factors.
22 Spizello pusillo	Field Sparrew	Bird	Bird	D/	2	Forests and Woodlands,	790	Variation Succession / /	Natural vegetation succession causing habitat loss for species of early successional habitats. / /	This is a suspected, but not known, threat. Pursue multiple strategies to ensure adequate supply of early-successional conditions across habitat types (regenerating clearcuts, shrubby pastures, right- of-ways, abandoned fields, restored strip mines, vegetated fencerows, etc) to meet reproductive needs of the species. (7.3.2)	Breed in open habitat with low perches, such as abandoned agricultural fields and pastures, fencerows, road and forest edges, and openings in wooded areas. Occasionally found in Christmas tree farms, orchards, and nurseries.	The reasons for declines are not completely understood. Pursue collection of ecological (breeding and winter) and reproductive data in Virginia as a path toward investigating geographic and temporal extent of limiting factors.
JE OPIZETIA PUSITIA	riciu opditow	DIIU	DILU	IV	a	omunianus, odvalillas	1.3.2	* C6Clauon Jullession / /				

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					_					Threat_Long	Actions	Working_Lands	Notes
1	Scientific_Name	Common_Name	Grouping	Type	Tier	COR	Habitats Large Tidal Rivers, Non-Tidal Wetlands, Tidal Creeks and Rivers, Tidal Wetlands, Estuaries Marine Nearshore. Jithan Lands	Threat_Code	Threat_Description	Major changes in an ecosystem resulting in changes to vegetation communities distinguished from natural vegetation succession, which may threaten open-country species (Threat 7.3.2). E.g., migration of deciduous trees towards the boreal forest, rising sea levels, desertification, thawing permafrost (in tundra), coral bleaching. //	Address impacts of sea level rise as follows: 1. Develop, secure funding for, implement and evaluate a pilot project involving thin layer deposition of dredge material obtained from local navigational channels to increase the elevation of seaside and Chesapeake Bay <i>low</i> marshes that used to support Forster's Tern (FOTE) colonies, but no longer do so because of sea level rise and subsidence. 2. Evaluate the effectiveness of this technique and its impacts on the marsh hydrology and plant and wildlife communities over the long term. NOTE: This will benefit Saltmarsh Sparrow, Virginia Rail and other marsh nesting species. (11.1.1)	Nests in brackish and saltwater marshes typically on wracks of dead and occasionally on abandoned muskrat lodges and crab pots stored on marsh islands. Forages over open ocean and coastal inshore waters, and estuaries. Roosts on beaches, mudflats and on a variety of artificial structures, including those located in urban areas (e.g., docks, piers, pilings, etc.).	Other potential threats for which no achievable actions have been identified: 11.2.2 (salinity impacts on prey); 11.3.3 (temp impacts on prey); 11.5.2
3	 4 Plegadis Falcinellus 	Glossy Ibis	Bird	Bird		9	Riparian and Floodplains, Shorelines, Beaches and Dunes, Lakes, Tidal Wetlands, Artificial Impoundments	11.1.1	/ Changes in Vegetation Communities / Human Intrusions and Disturbance / Aquatic Plants	Major changes in an ecosystem resulting in changes to vegetation communities distinguished from natural vegetation succession, which may threaten open-country species (Threat 7.3.2). E.g., migration of deciduous trees towards the boreal forest, rising sea levels, desertification, thawing permafrost (in tundra), coral bleaching. / Threats from activities (unrelated to the use of biological resources) that disturb, alter, or destroy habitats and their species. /	Address loss of high marsh shrub habitat in marshes as follows: 1. Develop, secure funding for, implement and evaluate a pilot project involving thin layer deposition of dredge material obtained from local navigational channels to increase the elevation of seaside and Chesapeake Bay marshes that used to support wading bird colonies, including GLIB, but no longer do so because of the disappearance of salt tolorant shrubs e.g., <i>Iva frutescens, Baccharis halimifolia, Morella cerifera</i>) due to subsidence and frequent tidal inundation. 2. A second component of this project may include the planting of desired shrubs if reestablishment doesn't occur naturally. 3. Evaluate the effectiveness of this technique and its impacts on the marsh hydrology and plant and wildlife communities over the long term. NOTE: Glossy Ibis (GLIB) are very vulnerable to tidal inundation (and storm surges) because they tend to nest on the ground or just above the ground. (11.1.1), 1.Gain permission to post bird closure signs around key GLIB colonies that are located on unprotected private and public marshes and islands in the Chesapeake Bay. 2. Post bird closure signs around key GLIB colonies located on VMRC-owned seaside marshes that are vulnerable to human disturbance. 3. Work with CPOs to establish a law enforcement presence at these posted sites. (6), 1. Improve existing wading bird breeding habitat by conducting regular control of phragmites and other invasive plant species at coastal DWR WMAs with suitable GLIB breeding habitat. NOTE: this will benefit all nesting wading birds. (8.1.4)		Other potential threats for which no achievable actions have been identified: 11.5.2; 11.2.2 (salinity impacts on prey); 11.3.3 (temp impacts on prey)
										/ Harvesting of wild terrestrial or semi-aquatic animal species (e.g., beavers_ by trapping that is governed by management measures. Includes incidental killing, but animal control by trapping should be classified under "Management/control for terrestrial animals" (Threat 5.1.5). E.g., trapping of wild terrestrial or semi-aquatic animals for fur, meat, taxidermy, trophies, non-target birds or prey caught in traps. / Lead released into the environment in a solid form (e.g., pellets) from a source other than industrial effluents (Threat 9.2.6) E.g., lead from ammunition or fishing gear contaminating the environment, ammunitions from shooting ranges.	Model risk for high use wintering areas utilizing the Eastern Golden Eagle Working Group's 3D spatial dataset (3.3.2), Conduct outreach to fur trappers to minimize Golden Eagle by-catch through BMPs and to inform them of the exposed bait trapping regulation. (5.1.2), Conduct outreach to the deer hunting community about the negative impacts of spent ammunition fragments in offal piles and lost game. Encourge the voluntary use of non-lead ammunition and disposal of offal piles so they are not accessible to raptors and corvids. (9.4.2)		
3	Aquila chrysaetos	Golden Eagle (Winter)	Bird	Bird	1	a	Forests and Woodlands	3.3.2, 5.1.2, 9.4.2	Wind Farms / Trapping / Solid Lead Perennial Cropping Systems / Vegetation Succession / Terrestrial	Crops that are associated with less intensive agricultural practices that have less of an ecological impact than do annual crops. E.g., pastures, forage crops, hay, alfalfa, clover. / Natural vegetation succession causing habitat loss for species of early successional habitats. /	Create/maintain a supply of high-quality old-field breeding habitat through coordination with partners on lands in public/protected ownership and via continued outreach to and engagement with private landowners with working lands, in order to address habitat loss/degredation via ecological succession, overgrazing by cattle, invasive species, and mechanical clearing (ex. mowing/bush-hogging) (2.1.2, 7.3.2, 8.1.1)		Continue surveys and monitoring to evaluate near- and long-term population trajectories within the species' major population centers (Highland/Bath County, Southwest Virginia), to assess the status of the species on public and protected lands, and to fill gaps in our knowledge of the species' distribution in Virginia, The reasons for declines are not completely understood. Pursue collection of ecological and reproductive data in Virginia, and, via Southern Wings, further explore distribution and ecology on its wintering grounds in northern South America, as a path toward further investigating geographic and temporal extent of limiting factors.
3	5 Vermivora chrysoptera 7 Ammodramus savannarum	Golden-winged Warble	er Bird	Bird		b	Shrublands Grasslands, Transportation Networks	2.1.2, 7.3.2, 8.1.1	Animals Perennial Cropping Systems / Herbicides and Pesticides /	Crops that are associated with less intensive agricultural practices that have less of an ecological impact than do annual crops. E.g., pastures, forage crops, hay, alfalfa, clover. / Includes the use of inputs for controlling crop pests. E.g., herbicides, insecticides, fungicides. /	Coordinate with and support expansion of programs such as the Virginia Grassland Bird Initiative, which conduct research and provide financial incentives to private landowners to adopt BMPs to improve grassland bird productivity (2.1.2), Research the impacts of pesticides on prey base and impact on grassland bird communities (9.3.3)	Breed primarily in pastures and hayfields, but may also use airports, managed grasslands and other grassy areas.	The reasons for declines are not completely understood. Pursue collection of ecological and reproductive data in Virginia, as well as data on migratory connectivity via coordinated multi-state projects, as a path toward investigating geographic and temporal extent of limiting factors.

	A	В	С	D	E	F	G	Н	L	Р	Т	U	V
										Threat Long	Actions	Working Lands	Notes
1	Scientific Name	Common Name	Grouping	Type	Tier	COR	Habitats	Threat Code	Threat Description				
28	Dumetella carolinensis	GrayCathird	Bird	Bird	IV	2	Shruhlands Urban Lands	732	Vertetation Succession / /	Natural vegetation succession causing habitat loss for species of early successional habitats. / /	This is a suspected, but not known, threat. Pursue multiple strategies to ensure adequate supply of early-successional conditions across habitat types (regenerating clearcuts, shrubby pastures, right-of-ways, abandoned fields, restored strip mines, shrubby wetlands, vegetated fencerows, etc) to meet reproductive needs of the species. (7.3.2)	Breeds in a variety of early successional habitats, including regenerating clearcuts, shrubby pastures, right-of-ways, abandoned fields, restored strip mines, shrubby wetlands, vegetated fencerows, etc, as well as in residential areas.	The reasons for declines are not completely understood. Due to differences in its migration status among Virginia's ecoregions (more populous along the coast in winter), investigate ecoregional population beeding trends within Virginia. Pursue collection of ecological and reproductive data in Virginia, as well as data on migratory connectivity via coordinated multi-state projects, as a path toward investigating geographic and temporal extent of limiting factors.
39	Butorides virescens	Green Heron	Bird	Bird	1	b	Forests and Woodlands, Riparian and Floodplains, Shorelines, Creeks and Rivers, Large Rivers, Tidal Headwater Streams, Tidal Creeks and Rivers, Large Tidal Rivers, Lakes, Ponds, Non-Tidal Wetlands, Tidal Wetlands, Estuaries, Urban Lands	No specific identified threats, see notes for more information.			Before any effective management can be done for this species, there is a need to develop and implement a survey design that captures a greater proportion of the Virginia breeding population, including those that occupy private properties in developed areas. Other potential threats for which no achievable actions have been identified: 1.1.1; 1.1.2; 8.2.5; 8.1.1 (predation by feral and domestic cats)	Nests in wooded residential areas near tidal and non-tidal ponds, lakes, rivers, marshes or estuaries.	 Develop a predictive Green Heron (GRHE) breeding habitat model and map potential colony sites on undeveloped private lands and in urban and residential areas throughout Virginia's coastal plain. 2. Develop and implement a citizen science project designed to confirm the presence of GRHE colonies at these sites. Using the information gathered from the first two actions, use a stratified sampling design to select GRHE colonies to be included in future coastwide colonial waterbird surveys that will yield an accurate GRHE population estimate. NOTE: GRHE nest widely thorughout the Coastal Plain, many on private lands in residential areas. Population estimates are inadequate to assess trends outside of the GRHE colonies that are surveyed regularly. GRHE have declined dramatically within the barrier island/lagoon system and on the Chesapeake Bay islands. Before any effective management can be done for this species, there is a need to develop and implement a survey design that captures a greater proportion of the Virginia breeding population, including those that occupy private properties in developed areas. Other potential threats for which no achievable actions have been identified: 1.1.1; 1.1.2; 8.2.5; 8.1.1 (predation by feral and domestic cats)
							Shorelines, Beaches and Dunes, Tidal Wetlands, Marine Nearshore, Urban Lands		Changes in Vegetation Communities / Increased Predation by Mesopredators / Commercial and	Major changes in an ecosystem resulting in changes to vegetation communities distinguished from natural vegetation succession, which may threaten open-country species (Threat 7.3.2). E.g., migration of deciduous trees towards the boreal forest, rising sea levels, desertification, thawing permafrost (in tundra), coral bleaching. / e.g., racoons, striped skunks, foxes, coyotes. / industrial parks, manufacturing plants, offices, shopping centers, all military base facilities, power plants, seaports, shipyards, airports	Address impacts of sea level rise as follows: 1. Enhance existing nesting habitat by adding sand to increase elevation in low nesting areas prone to tidal inundation on key Gull-billed Tern (GBTE) nesting islands in the sea barrier island/ lagoon system and in the Chesapeake Bay. 2. Offset breeding habitat loss by placing beach compatible dredge material on existing or remnant shoals along the barrier island chain and in the Chesapeake Bay. 3. Begin designing, planning and securing funding for the creation of new , well-elevated nesting habitats in protected inshore areas that are less susceptible to nor'easters and storm surges. (11.1.1), 1. Continue to support mammalian (raccoons, foxes, coyotes) management efforts on barrier islands that support seabird breeding colonies, including GBTE rookeries. 2. Support and implement various form of avian predator management (e.g., audio deterrents, harrassment, effigies, lethal removal) on islands where seabird monitoring efforts indicate the need for the limited removal of gulls, corvids, great horned owls and/or other native predatory species. NOTE: this action will benefit ALL beach nesting seabirds breeding on the barrier islands. (8.2.5), For populations nesting in urban areas: 1. Continue to monitor, manage and maintain the temporary nesting habitat used by GBTE on barges adjacent to the Hampton Roads Bridge-Tunnel (HRBT) until the construction of a new nesting island has been completed. 2. Track the annual number of pairs and breeding success of GBTE (and other seabird species) utilizing the new nesting island which will be located in the vicinity of the HRBT. 3. Maintain suitable breeding habitat and provide sufficient law enforcement protection for breeding GBTE and other seabird species on the new nesting island over the long term. (1.2.1)	In Virginia, they nest on artifical islands and on barges in the Hampton Roads area adjacent to a major interstate highway. They forage primarily over beaches and salt marshes, where hawking for insects is often primary method of capture. They occasionally plunge- dive for fish in nearshore ocean waters and coastal inshore waters.	Other potential threats for which no achievable actions have been identified: 11.2.2 (salinity impacts on prey during the breeding season); 11.3.3 (temp impacts on prey); 11.5.2; 11.4.2
40	Gelochelidon nilotica	Gull-billed Tern	Bird	Bird	1	a	Transportation Networks	11.1.1, 8.2.5, 1.2.1	Perennial Cropping Systems /	Crops that are associated with less intensive agricultural practices that have less of an ecological impact than do annual crops. E.g., pastures, forage crops, hay, alfalfa, clover. / Includes the use of inputs for controlling crop pests. E.g., herbicides, insecticides, fungicides. /	Coordinate with and support expansion of programs such as the Virginia Grassland Bird Initiative, which conduct research and provide financial incentives to private landowners to adopt BMPs to improve grassland bird productivity (2.1.2), Research the impacts of pesticides on prey base and impact on grassland bird communities (9.3.3)		The species is rare in Virginia, and surveys to document breeding populations are integral to developing a broader conservation strategy. Continue supporting surveys and research through partners. Coordinate with partners to implement surveys at sites of known historic and recent occurrences.
41	Ammodramus henslowii	Henstow's Sparrow	Bird	Bird	1	b	Forests and Woodlands, Boreal Forests	11.1.1	Herbicides and Pesticides / Changes in Vegetation Communities /	Major changes in an ecosystem resulting in changes to vegetation communities distinguished from natural vegetation succession, which may threaten open-country species (Threat 7.3.2). E.g., migration of deciduous trees towards the boreal forest, rising sea levels, desertification, thawing permafrost (in tundra), coral bleaching. / /	Ensure continued supply of suitable breeding habitat at high-elevation sites with which the species is associated, including supporting work by the Central Appalachian Spruce Restoration Initiative. Further investigate species' use of edges within forest interiors. (11.1.1)		Collect additional data on the breeding distribution of what is thought to be a relatively small population of this range-restricted species in Virginia, expanding upon data from the 2nd Virginia Breeding Bird Atlas, eBird reports and other previous survey efforts. Pursue collection of ecological and reproductive data in Virginia, as well as data on migratory connectivity (where within eastern United States does Virginia's Hermit Thrush winter) and winter ecology, as a path toward investigating geographic and temporal extent of limiting factors.

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1	Scientific_Name	Common_Name	Grouping	Туре	Tier	COR	Habitats	Threat_Code	Threat_Description	Threat_Long	Actions	Working_Lands	Notes
43	3 Larus smithsonianus	Herring Gull	Bird	Bird	11	b	Shorelines, Beaches and Dunes, Tidal Creeks and Rivers, Large Tidal Rivers, Non-Tidal Wetlands, Tidal Wetlands, Estuaries, Marine Nearshore, Marine Offshore and Oceanic, Urban Lands, Transportation Networks	8.1.4	Aquatic Plants / /	11	1. Improve existing Herring Gull breeding habitat at key seaside and Chesapeake Bay nesting sites that are not occupied by listed species or other SGCN by conducting regular control of phragmites and other invasive plant species at these sites. (8.1.4)	In Virginia, known to nest on artifical islands in the Hampton Roads area adjacent to a major interstate highway. Forages at dumpsters, landfills, restaurants, parking lots and other urban areas where there are concentrations of refuse. In Virginia, known to nest on artifical islands in the Hampton Roads area adjacent to a major interstate highway.	Other potential threats for which no achievable actions have been identified: 8.2.5; 7.3.3; 11.5.2; 9.4.4
							Grasslands, Glades and Barrens, Beaches and Dunes, Urban Lands, Transportation Networks,			Includes the use of inputs for controlling crop pests. E.g., herbicides, insecticides, fungicides. /	Research the impacts of pesticides on prey base and impact on grassland bird communities (9.3.3) /	Breeds in open areas with bare ground and low grasses, including sand dunes, cultivated fields, and grasslands at airports, reclaimed mine sites and residential areas.	The reasons for declines are not completely understood. Pursue collection of ecological (breeding and winter) and reproductive data in Virginia as a path toward investigating geographic and temporal extent of limiting factors.
44	Eremophilia alpestris Geothlypis formosa	Horned Lark Kentucky Warbler	Bird	Bird		b	Mines Forests and Woodlands, Riparian and Floodplains, Non-tidal Wetlands	9.3.3	Herbicides and Pesticides / /	Harvesting trees/other forest species in natural environments for timber or fiber outside of plantations (Threat 2.2). Includes cutting and the use of machinery, as well as wood storage and debris management, excluding their transport (Threat 4.1) and associated erosion (Threat 9.3) /	Better information is needed on forestry practices that promote appropriate vegetation structure and conditions that result in suitable Kentucky Warbler habitat; build on previous studies and coordinate on development of state-level or regional BMPs		The reasons for declines are not completely understood. Pursue collection of ecological and reproductive data in Virginia, as well as data on migratory connectivity via coordinated multi-state projects, as a path toward investigating geographic and temporal extent of limiting factors.
AF	5 Ballus elegans	King Bail	Bird	Bird		h	Tidal Wetlands, Non-tidal Wetlands	11 1 1 11 22 8 1 4	Changes in Vegetation Communities /	Major changes in an ecosystem resulting in changes to vegetation communities distinguished from natural vegetation succession, which may threaten open-country species (Threat 7.3.2). E.g., migration of deciduous trees towards the boreal forest, rising sea levels, desertification, thawing permafrost (in tundra), coral bleaching. / /	Address impacts of sea level rise and saltwater intrusion as follows: 1. purchase and conserve properties in marsh migration zones where upland habitats have a high probablity of transforming into suitable King Rail (KIRA) breeding habitat. 2. Manage WMAs that encompass suitable marsh habitats for breeding KIRA (ex. Princess Anne WMA). 3. Conduct regular KIRA occupancy and breeding productivity monitoring on DWR WMAs that are managed for marsh-nesting birds to evaluate the effectiveness of management strategies. (11.1.1, 11.2.2), Conduct phragmites control in tidal and nontidal freshwater marshes in areas of known KIRA occupancy, and monitor effects of control efforts on KIRA occupancy and abundance.(8.1.4)		Conduct breeding season surveys to collect data on occupancy, abundance and distribution of KIRA in tidal and non-tidal freshwater marshes so as better define areas of importance for the species.
							Charolines Reaches and Dunes			Major changes in an ecosystem resulting in changes to vegetation communities distinguished from natural vegetation succession, which may threaten open-country species (Threat 7.3.2). E.g., migration of deciduous trees towards the boreal forest, rising sea levels, desertification, thawing permafrost (in tundra), coral bleaching. / /	Address impacts of sea level rise as follows: 1. Develop, secure funding for, implement and evaluate a pilot project involving thin layer deposition of dredge material obtained from local navigational channels to increase the elevation of seaside and Chesapeake Bay marshes that used to support Laughing Gull (LAGU) colonies, but no longer do so because of sea level rise and subsidence. 2. Once restoration efforts have been completed, deploy social attraction techniques (e.g., decoys, audio lures) to attract LAGU to the restored sites. 3. Evaluate the effectiveness of action # 1 and its impacts on the marsh hydrology and plant and wildlife communities over the long term. 4. Purchase and conserve properties in marsh migration zones where upland habitats have a high probablity of transforming into suitable LAGU breeding habitat (NOTE: This action will benefit FOTE, VIRA and other marsh nesting species). 2. Once habitat transformation has occurred, deploy social attraction techniques (e.g., decoys, audio lures) to attract LAGU to these new sites. (11.1.1)	Breeds on barrier islands with low vegetated dunes, marsh islands in the Chesapeake Bay, and in saltwater marshes in the seaside lagoon system. Also breeds and on artificial islands and barges in the Hampton Roads area adjacent to a major interstate highway. Forages along bays and estuaries, near harbors, fishing operations, and ag fields and landfills near the coast.	Other potential threats for which no achievable actions have been identified: 11.5.1; 11.5.2
47	7 Leucophaeus atricilla	Laughing Gull	Bird	Bird		b	Tidal Wetlands, Estuaries, Urban Lands, Transportation Networks	11.1.1	Changes in Vegetation Communities / /	Harvesting trees/other forest species in natural environments for timber or fiber outside of	This is a suspected, but not known, threat. Pursue research of sensitivity to habitat change and forest management, which is poorly understood, although it appears that maintaining mid-		The reasons for declines are not completely understood. Pursue collection of ecological and reproductive data in Virginia, as well as data on migratory connectivity via coordinated multi-state
48	B Empidonax minimus	Least Flycatcher	Bird	Bird	II	а	Forests and Woodlands	5.3	Logging and Wood Harvesting / /	prantations (meat 2.2.). Includes cutting and the use of machinery, as well as wood storage and debris management, excluding their transport (Threat 4.1) and associated erosion (Threat 9.3) /	/		projects, as a path toward investigating geographic and temporal extent of limiting factors.

	А	В	C	D	E	F G	Н	L	Р	Т	U	V
									Threat_Long	Actions	Working_Lands	Notes
1	Scientific_Name	Common_Name	Groupin	g Type	Tier C	OR Habitats	Threat_Code	Threat_Description				
									Major changes in an ecosystem resulting in	Address impacts of sea level rise as follows: 1. Enhance existing nesting habitat by adding sand to	Nests on the barrier islands, on	Other potential threats for which no achievable actions have been
									changes to vegetation communities distinguished	increase elevation in low nesting areas prone to tidal inundation on key seaside Least Tern (LETE)	shell rakes in the seaside lagoon	identified: 3.3.2; 6.0 (human disturbance on nesting beaches);
									from natural vegetation succession, which may	nesting islands and on historic nesting beaches in the Chesapeake Bay, including Grandview Nature	system and and occasionally on	7.3.1; 8.1.1; 8.2.5; 8.4.2; 11.2.2; 11.3.3 (gradual change in ocean
									threaten open-country species (Threat 7.3.2). E.g.,	Preserve in Hampton, VA. 2. Offset breeding habitat loss by placing beach compatible dredge	rooftops in the Hampton Roads	temperatures that is influencing the distribution and abundances
									migration of deciduous trees towards the boreal	Begin designing planning and securing funding for the creation of new well-elevated pesting	area and other urban centers. Also	or forage fish) 11.4.2, 11.5.2
									forest, rising sea levels, desertification, thawing	habitats in protected inshore areas that are less susceptible to nor easters and storm surges.	nests on an urban dredge material	
									permafrost (in tundra), coral bleaching. / e.g.,	(11.1.1). 1. Continue to support mammalian (raccoons, foxes, covotes) management efforts on	management site. Forages over	
									racoons, striped skunks, foxes, coyotes. /	barrier islands that support the majority of VA's LETE breeding population. 2. Support and	ocean nearshore waters, inlets,	
									industrial parks, manufacturing plants, offices,	implement various form of avian predator management (e.g., audio deterrents, harrassment,	coastal bays, estuaries, tidal rivers,	
									shopping centers, all mutary base facilities, power	effigies, lethal removal) on islands where seabird monitoring efforts indicate the need for the	and occasionally over freshwater	
									plants, seaports, snipyards, airports	limited removal of gulls, corvids, great horned owls and/or other native predatory species. (8.2.5),	ponds.	
										For populations nesting in urban areas: 1. Continue to support the US Army Corps of Engineers'		
										(USACOE) monitoring, management and protection of breeding LETE at the Craney Island Dredged		
						Shorelines, Beaches and D	ines.			implementing the CIDMMA Management Plan. (1, 2, 1)		
						Tidal Creeks and Rivers, La	ge	Changes in Vegetation Communities	,	Implementing the Cidminia Management Plan. (1.2.1)		
						Tidal Rivers, Lakes, Ponds,	lidal	Increased Predation by				
						Wetlands, Estuaries, Marin	9	Mesopredators / Commercial and				
49	Sternula antillarum	Least Tern	Bird	Bird	III a	Nearshore, Urban Lands	11.1.1, 8.2.5, 1.2.1	Industrial Areas				
									Major changes in an ecosystem resulting in	Address loss of high marsh shrub habitat in marshes as follows: 1. Develop, secure funding for,		Other potential threats for which no achievable actions have been
									changes to vegetation communities distinguished	implement and evaluate a pilot project involving thin layer deposition of dredge material obtained		identified: 11.5.2; 11.2.2; 11.3.3 (temp impacts on prey)
									from natural vegetation succession, which may	from local navigational channels to increase the elevation of seaside and Chesapeake Bay marshes		
									threaten open-country species (Threat 7.3.2). E.g.,	that used to support wading bird colonies, including Little Blue Heron (LBHE), but no longer do so		
									migration of deciduous trees towards the boreal	because of the disappearance of salt tolorant shrubs (e.g., Iva frutescens, Baccharis halimifolia,		
									forest, rising sea levels, desertification, thawing	Morelia cerifera) due to subsidence and frequent tidal inundation. 2. A second component of this project may include the planting of desired shrubs if reastablishment describe actually 2		
									permafrost (in tundra), coral bleaching. / Threats	Evaluate the effectiveness of this technique and its impacts on the marsh hydrology and plant and		
									from activities (unrelated to the use of biological	wildlife communities over the long term. (11.1.1). 1.Gain permission to post bird closure signs		
									resources) that disturb, alter, or destroy habitats	around key LBHE colonies that are located on unprotected private and public marshes and islands		
									and their species. / Research activities that are	in the Chesapeake Bay. 2. Post bird closure signs around key LBHE colonies located on VMRC-		
									governed by management measures that can affect	owned seaside marshes that are vulnerable to human disturbance. 3. Work with CPOs to establish		
									individual or by degrading the environment E g	a law enforcement presence at these posted sites. (6), 1. Design, implement and evaluate a more		
									research fisheries requiring mortality trampling by	accurate breeding wading bird survey methodology that also avoids or minimizes observer		
						Riparian and Floodplains.			research teams	disturbance. The current adult flush count method has never been tested for accuracy and is highly susceptible to observe high (6.2.1)	(
						Shorelines, Beaches and D	ines.					
						Tidal Wetlands, Non-Tidal		Changes in Vegetation Communities	,			
						Wetlands, Artificial		Human Intrusions and Disturbance /				
50	Egretta Caerulea	Little Blue Heron	Bird	Bird	I a	Impoundments	11.1.1, 6, 6.3.1	Research Activities				
									Crops that are associated with less intensive	Address loss and degradation of suitable shrubby pasture habitat due to intensification of livestock	Prefers areas of grassland with	Continue coordination with Loggerhead Shrike Working Group
									agricultural practices that have less of an	farming on private lands by developing shrike habitat Best Management Practices (BMP) and	small trees, fences, woody	(WG) to 1. develop U.S. Action Plan based on final Conservation
									ecological impact than do annual crops. E.g.,	engaging with land managers, landowners and farmers to increase awareness of shrike habitat	vegetation or hedgerows. Thorny	Plan; and 2. to fill knowledge gaps pertaining to demographics (ex.
									pastures, forage crops, hay, alfalfa, clover. //	requirements and to incentivize maintenance of existing habitat; work with partners to maintain	shrubs are used for nesting.	quantifying mortality vs. dispersal), prey availability, disease,
										and expand existing suitable habitat on public and conservation lands (2.1.2)		shrike occupancy of sites at the landscape level fex, availability of
												impalement structures])
51		Loggorboad Shriko	Bird	Bird		Shrublands	212	Barannial Cropping Systems / /				P
51		Loggerneau Sinke	Diru	Diru	1 a	Sillubidilus	2.1.2	Perennial Cropping Systems 77	Major changes in an ecosystem resulting in	Address impacts of sea level rise as follows: 1. Increase the elevation of mudflats used by foraging		Other potential threats for which no achievable actions have been
									changes to vegetation communities distinguished	and roosting Marbled Godwit (MAGO) that are in danger of being lost to sea level rise through the		identified: 7.3.3: 8.1.1 (introduced PEFA impacts): 8.4.2: 9.2.1:
									from natural vegetation succession, which may	thin layer deposition of dredge material obtained from adjacent navigational channels. 2. Evaluate		11.4.2 (drought impacts on prey availability); 11.2.2 (salinity shift
									threaten open-country species (Threat 7.3.2) E g	the effectiveness of this technique by conducting before and after shorebird surveys to quantify		impacts on prey); 11.3.3 temp change impacts on prey); 11.5.2
									migration of deciduous trees towards the boreal	differences in shorebird use and by conducting before and after benthic invertebrate surveys and		
									forest, rising sea levels, desertification, thawing	sampling to measure differences in prey types, density and availability. 3. Enhance and increase		
1						Shorelines, Beaches and D	ines,		permafrost (in tundra), coral bleaching. / /	MAGO roosting habitat in the seaside marshes by increasing the elevation and footprint of eroding		
1						Tidal Creeks and Rivers, Tic	al	Changes in Vegetation Communities	·	shell rakes. (11.1.1)		
52	Limosa fedoa	Marbled Godwit (winter	r) Bird	Bird	IV a	Wetlands	11.1.1	/				
									Major changes in an ecosystem resulting in	Conduct the following activities as conservation measures for Marsh Wren (MAWR) marsh habitat		Pursue detailed investigation of migratory status of Virginia
1									changes to vegetation communities distinguished	threatened by sea level rise: 1. purchase and conserve properties in marsh migration zones where		MAWR, which may be partial migrants, to determine whether
									from natural vegetation succession, which may	upland habitats have a high probablity of transforming into suitable MAWR breeding habitat. 2.		potential threats should be investigated on wintering grounds
									threaten open-country species (Threat 7.3.2). E.g.,	Manage coastal WMAs that encompass suitable marsh habitats for breeding MAWR. 3. Conduct		outside of Virginia
									migration of deciduous trees towards the boreal	are managed for march-nesting birds to evaluate the effectiveness of management strategies		
									forest, rising sea levels, desertification, thawing	(11.1.1). 1. Improve existing MAWR breeding habitat by conducting regular control of phragmites		
									permatrost (in tundra), coral bleaching. 77	and other invasive plant species at coastal DWR WMAs with suitable MAWR breeding habitat.		
						Non-Tidal Wetlands Tidal		Changes in Vegetation Communities	,	8.1.4)		
53	Cistothorus nalustris	Marsh Wren	Bird	Bird	III h	Wetlands	11 1 1 8 1 4	Aquatic Plants /				
- 55			Jird	5110	0				Major changes in an ecosystem resulting in	Address impacts of sea level rise as follows: 1. purchase and conserve properties in marsh		Conduct periodic monitoring (ex. every 5-10 years) at a network of
1									changes to vegetation communities distinguished	migration zones where upland habitats have a high probability of transforming into suitable		sites to evaluate population trend/stability
1									from natural vegetation succession, which may	Nelson's Sparrow (NESP) wintering habitat. 2. Manage coastal WMAs that encompass suitable		
1									threaten open-country species (Threat 7.3.2). E.g.,	marsh habitats for winterig NESP. 3. Conduct regular SALS occupancy and abundance monitoring		
1									migration of deciduous trees towards the boreal	on DWR WMAs that are managed for NESP to evaluate the effectiveness of management		
1									forest, rising sea levels, desertification, thawing	strategies. (11.1.1), 1. Improve existing NESP wintering habitat by conducting regular control of		
1									permafrost (in tundra), coral bleaching. / /	prinagmites and other invasive plant species at coastal DWR WMAs with suitable NESP breeding		
1								Changes in Vegetation Communities	(Haulal. (0.1.4)		
54	Ammodramus nelsoni	Nelson's Sparrow (wint	er) Bird	Bird	lll b	Tidal wetlands	11.1.1, 8.1.4,	Aquatic Plants /				

Γ	A	В	C	D	E	F	G	Н	L	Р	Т	U	V
										Threat_Long	Actions	Working_Lands	Notes
1	Scientific_Name	Common_Name	Grouping	Туре	Tier	COR	Habitats	Threat_Code	Threat_Description				
										Intervention aimed at preventing and putting out forest fire (fire management). E.g., putting out forest fires, controlled burning, creating firebreaks and trenches, and other measures. / Natural	Recent increased restrictions in particulate matter for air quality, time of year fire restrictions due to bats, and increasing human population make prescribed fire more and more difficult. Need continued lobbying for exceptions for properly planned prescribed fire and more incentives to conduct fire, and more education about its value. (7.1.2), More and more open, early-successional	Nest in open grasslands, along old fence edges, and old croplands. Species does best with a patchwork of woodland edges, grassland and	
										vegetation succession causing habitat loss for species of early successional habitats. / Cultivation of hybrid poplars and other species that	lands are being planted to trees, mainly commercial pine trees. There should be close scrutiny of trees being planted for profit in the name of carbon sequestration and timber industry support. Incentives should be increased to maintain and increase early-succession plant communities which	croplands.	
										are used for pulp production.	include the most endangered habitat in the state - native grasslands. (7.3.2), Increases in commercial pine tree growth rates have made growing pine pulpwood more and more intense. New generation trees close canopy faster, shading out early-succession vegetation much quicker, and reducing the amount of time a regenerating clear-cut is useful for early succession wildlife species. Efforts should increase to incentivize slower growing, more natural pine ecosystems like short-leaf and long-leaf pine. More education is needed for the landowners about these pine types, and federal incentives programs should cease to incentivize loblolly pine. (2.2.1)		
			D . 1	D : 1			Grasslands, Shrublands,		Suppression in the Fire Regime / Vegetation Succession / Plantation of				
55	Colinus virginianus	Northern Bobwhite	Bird	Bird	111	а	Savannahs, Glades and Barrens	7.1.2, 7.3.2, 2.2.1	Pulpwood		Durante responses on antential offersta of compatibility for an itigs with Durantee Charlings, declining		The second holized the dealize of some near lations of the
							Forests and Woodlands,	No specific identified threats, see notes for			availability of suitable nest-cavity substrate (snags, dead limbs, and live trees with heart rot), and pesticide application on golf courses, agricultural fields, and suburban lawns.	habitats with trees, including open woodlands and pine savannas, forest edges, open fields with scattered trees, as well as city parks and suburbs.	Northern Flicker are not well understood. Pursue research on potential effects of competition for cavities with European Starlings, declining availability of suitable nest-cavity substrate (snags, dead limbs, and live trees with heart rot), and pesticide application on golf courses, agricultural fields, and suburban
56	Colaptes auratus	Northern Flicker	Bird	Bird	Ш	b	Savannahs, Urban Lands	more information,	11				lawns.
										/ e.g., ranavirus in amphibians, rabies in raccoons. /	1. Support tracking studies to determine if migrant and wintering Northern Gannet (NOGA) forage in the foot print of Offshore Wind (OSW) leases in the central Atlantic Wind Energy Areas <i>before</i> facilities are fully constructed and operational. 2. support additional tracking studies to determine if migrant and wintering NOGA actively avoid OSW facilities <i>after</i> they become fully operational. (3.3.2), 1. Develop a rapid response plan for seabird Highly Pathogenic Avian Influenza and other disease-related mortality/morbidity events that occur during the breeding season. NOTE: this action is intended for all seabird species that breed in Virginia. (8.4.2)		Highly pathogenic avian influenza (HPAI) caused the worst NOGA mass-mortalities in the northeast Atlantic between April–September 2022 with tens of thousands of casualties documented in breeding colonies on both sides of the Atlantic during this short period of time. At the same time, HPAI was detected among various species of terns in US colonies primarily in the northeast and the great lakes. While NOGA do not breed in VA, the Commonwealth supports a significant wintering population that often forage in dense flocks in nearshore waters and in the lower Chesapeake Bay. Other potential threats for
		Northern Connet					Tidal Creeks and Rivers, Large Tidal Rivers, Estuaries, Marine						which no achievable actions have been identified: 9.4.4; 9.2.1; 3.1.2; 5.4.2; 11.2.1; 11.2.2; 11.3.3; 11.3.4
57	Moras bassanus	(transignt/winter)	Bird	Dird	N/		Nearshore, Marine Offshore and	222 0 1 2	Wind Forms (Viral Pathogons (
57	Moras bassanus	(transient/winter)	Bird	Bird	IV	а	Oceanic	3.3.2, 8.4.2,	Wind Farms / Viral Pathogens /	Medium- to high-density development for	Promote conservation and agricultural land easements, agricultural subsidy programs, and local land use planning efforts to mitigate development impacts (1, 1, 1). Promote conservation and	Breeds in open marshy, grassland	
							Grasslands, Shrublands, Glades and Barrens, Riparian and Floodplains, Shorelines, Beaches		Dense Housing and Urban Areas /	Allows very little to no maintenance of ecological functions. E.g., urban areas, suburbs, villages, schools, libraries, seniors' housing, hospitals / Crops that are associated with less intensive agricultural practices that have less of an ecological impact than do annual crops. E.g., pastures, forage crops, hay, alfalfa, clover. / Includes the use of inputs for controlling crop pests. E.g., herbicides, insecticides, fungicides.	agricultural land easements, agricultural subsidy programs, and local land use planning efforts to mitigate development impacts (2.1.2), Research the impacts of neonicotinoids on prey base and impact on Northern Harrier health/mortatality (9.3.3)	large fields, crop fields, estuaries, and floodplains.	
							and Dunes, Non-tidal Wetlands,		Perennial Cropping Systems /	,,,,,,			
58	Circus cyaneus	Northern Harrier (wint	er) Bird	Bird	Ш	b	Tidal Wetlands, Estuaries,	1.1.1, 2.1.2, 9.3.3	Herbicides and Pesticides				
										Natural vegetation succession causing habitat loss for species of early successional habitats. / /	This is a suspected, but not known, threat. Pursue multiple strategies to ensure adequate supply of early-successional conditions across habitat types to meet reproductive needs of the species. (7.3.2)	F Breeds in open habitats with scattered shrubs and small trees, including shrubby pastures, old fields and other early successional habitat, as well as residential areas including parks.	The reasons for declines are not completely understood. Pursue collection of ecological (breeding and winter) and reproductive data in Virginia as a path toward investigating geographic and temporal extent of limiting factors.
59	Mimus polyglottos	Northern Mockingbird	Bird	Bird	IV	а	Shrublands, Urban Lands	7.3.2	Vegetation Succession / /				
		Northern Rough-winge	ed				Grasslands, Shrublands, Glades and Barrens, Riparian and Floodplains, Shorelines, Urban	No specific identified threats, see notes for		//	Pursue collection of ecological and reproductive data in Virginia, as well as data on migratory connectivity via coordinated multi-state projects.	Nests in burrows created by other species, including kingfishers and Bank Swallows, in clay, sand, or gravel banks, typically near water. May also nest in crevices in bridges and buildings. Often nest near Bank Swallow colonies, as a single pair or in small groups.	The reasons for declines are not well understood. Pursue collection of ecological and reproductive data in Virginia, as well as data on migratory connectivity via coordinated multi-state projects.
60	Stetgiaopteryx serripennis	SWallow	Bira	BILO	111	С	Lands, Transportation Networks	more information,	11	Threats from activities (unrelated to the use of	Continue coordination with VDOT and other partners to minimize impact of construction	In Virginia nests on cliff facos	
							Cliff and Talus, Tidal Wetlands,			biological resources) that disturb, alter, or destroy habitats and their species. / /	maintenance and repair to nesting pairs on artificial structures including bridges, buildings, powerplants and other substrates; continue coordination with rock climbing advocacy groups and public agencies to implement cliff closures to avoid impacts to pairs nesting on cliff faces (6) continue occupancy and reproductive monitoring of known occupied sites and conduct surveys of sites of unknown occupancy (with an emphasis on natural cliff faces and on quarries), in order to monitor the trajectory of this small breeding population as it grows toward recovery	quarries and a variety of artificial structures (hack towers, hi-rise buildings, industrial smokestacks, bridges, etc) within open landscapes or that include open areas for huntier	
61	Falconeregrinus	Peregrine Falcon	Bird	Bird		a	Networks Mines	6	Human Intrusions and Disturbance / /			a. sus for nunting.	
01	i ateo pereginius	I SIGGING I ALUII	DIIU	Diru	. P	a	noonuna, rillica	2	maman merusions and Disturbance7 7				

	А	В	С	D		E	F	G	Н	L	Р	Т	U	V
1	Scientific Name	Common Name	Grouning	Type	ті	ier C	ов н	abitats	Threat Code	Threat Description	Threat_Long	Actions	Working_Lands	Notes
			Cooping	, jpc							Major changes in an ecosystem resulting in changes to vegetation communities distinguished from natural vegetation succession, which may threaten open-country species (Threat 7.3.2). E.g., migration of deciduous trees towards the boreal forest, rising sea levels, desertification, thaving permafrost (in tundra), coral bleaching. / Natural vegetation succession causing habitat loss for species of early successional habitats. / e.g., racoons, striped skunks, foxes, coyotes.	Address impacts of sea level rise as follows: 1. Enhance existing nesting habitat by adding sand/shell mix to increase elevation in low nesting areas prone to tidal inundation on key Piping Plover (PIPL) nesting islands. 2. Offset habitat loss by placing beach compatible dredge material on existing or remnant shoals along the barrier island chain. 3. Begin designing, planning and securing funding for the creation of new , well-elevated nesting habitats in protected inshore areas that are less susceptible to nor'easters and storm surges. NOTE: These measures will also benefit nesting American Oystercatcher and Wilson's Plover (11.1.1), 1.Create, monitor and evaluate corridors between nesting and brood foraging areas in areas where vegetation (primarily S. patens) impedes chick access to backside mudflats by mechanically removing vegetation along a line that avoids dunes and other natural features. 2. Increase suitable PIPL nesting habitat (i.e., sparsely vegetated washover flats and berm) by mechanically removing vegetation from key plover nesting areas, especially where predatory gulls have begun nesting in the vegetation. 3. If actions 1 and 2 prove to be successful, maintain the corridors and keep nesting areas sparely vegetated by mechanically or manually removing vegetation on an as-needed basis. (7.3.2), 1. Continue to support mammalian (raccoons, foxes, coyotes) management efforts on barrier islands that support the majority of VA's PIPL breeding population. 2. Support and conduct various forms of avian predator management (e.g., audio deterrents, harrassment, effigies, lethal removal) on islands where plover productivity monitoring efforts indicate the need for the limited removal of gulls, corvids, great horned owls and/or other predatory species. 3. Continue to monitor ghost crab activity around PIPL nests and engage in limited removal of crabs if the data support such an action. (8.2.5)		
							Sł	horelines, Beaches and Dunes,	,	Changes in Vegetation Communities / Vegetation Succession / Increased	/			
62	Charadrius melodus	Piping Plover	Bird	Bird	1	a	FC	dal Wetlands orests and Woodlands, brublands, Savanas	11.1.1, 7.3.2, 8.2.5	Predation by Mesopredators	Natural vegetation succession causing habitat loss for species of early successional habitats. / /	This is a suspected, but not known, threat. Pursue multiple strategies to ensure adequate supply or early-successional conditions across habitat types (regenerating clearcuts, open pine savannas, shrubby pastures, right-of-ways, abandoned fields, restored strip mines, etc) to meet reproductive needs of the species. (7.3.2)	f	The reasons for declines are not completely understood. Pursue collection of ecological and reproductive data in Virginia, as well as data on migratory connectivity via coordinated multi-state projects, as a path toward investigating geographic and temporal extent of limiting factors.
05		Purple Sandpiper		Diiu		<u>, a</u>	Sł	horelines, Tidal Wetlands,	No specific identified threats, see notes for	Vegetation Succession 7	//	Conduct investigations to better address the species' habitat and foraging requirements.		Purple Sandpiper in Virginia typically occur on groins, revetments and other artificial rocky structure, but little is knows about their habitat needs and diet. Conduct investigations to better address the species' habitat and foraging requirements. Potential threats for which no achievable actions have been identified: 8.4.2; 9.2.1; 11.2.2 (salinity shift impacts on prey); 11.3.3 (temp change impacts on prey)
64	Calidris maritima	(transient)	Bird	Bird		V D	ES	ituaries	more information,		e.g., racoons, striped skunks, foxes, coyotes. / / Major changes in an ecosystem resulting in changes to vegetation communities distinguished from natural vegetation succession, which may threaten open-country species (Threat 7.3.2). E.g., migration of deciduous trees towards the boreal forest, rising sea levels, desertification, thawing permafrost (in tundra), coral bleaching.	1. Fund research that will map Red Knot (REKN) disturbance exposure risk from breeding Peregrines Falcon (REKN's primary avian predator) by tracking where breeding falcons are hunting and comparing these locations to known migrant REKN concentration areas. 2. Use the results from the aforementioned study to inform management decisions for specific Eastern Shore falcon breeding sites. NOTE: This research will also help assess the effect breeding falcons have on other migrant shorebirds and breeding shorebirds and seabirds. (8.2.5), 1.Require research that accurately assesses REKN collision risks associated with offshore wind turbines through the state permitting process. 2. Promote and participate in the development of a regional Offshore Wind (OSW) avian conpensatory mitigation program to ensure that OSW development impacts on listed REKN, PIPL, and Roseate Terns as well as other key SGCN are adequately monitored across multiple spatial scales using the best methods and latest technologies. (3.3.2), Address impacts of sea level rise as follows: 1. Offset stopover habitat loss by regularly placing beach compatible dredge material on existing or remnant shoals in the barrier island/lagoon system and in the Chesapeake Bay (note: this will also help protect and perhaps increase the elevations of adjacent marshes and mudflats). 2. Increase shorebird stopover foraging habitat in VA by enhancing existing and creating new mudflats in the Chesapeake Bay through the thin layer deposition of compatible dredge material obtained from local navigational channels. (11.1.1)		Other potential threats for which no achievable actions have been identified: 9.2.1; 11.4.2 (drought impacts on prey availability); 11.2.2 (salinity shift impacts on prey); 11.5.1 (pH impacts on prey); 11.3.3 (temp impacts on prey)
65	Calidris canutus rufus	Red Knot (transient)	Bird	Bird	1	a	Sh Es	norelines, Tidal Wetlands, stuaries	8.2.5, 3.3.2, 11.1.1	Increased Predation by Mesopredators / Wind Farms / Changes in Vegetation Communities	Intervention simed at proventing and putting out	Maintain /ayoand poor term and long term babitat supply on Big Woods WMA. Elippo Contry		Continue population and reproductive monitoring at Diney Grove
											forest fire (fire management). E.g., putting out forest fires, controlled burning, creating firebreaks and trenches, and other measures. / Natural vegetation succession causing habitat loss for species of early successional habitats. /	WMA, Piney Grove Preserve, Great Dismal Swamp National Wildlife Refuge and other stragegic sites via management for mature open pine savanna. (7.1.2, 7.3.2)		Preserve/Big Woods Wildlife Management Area and Great Dismal Swamp National Wildlife Refuge to track demographic response to management, to address management needs at the group level (including cavity supply, cavity competitors and nest predators) and to ensure that this small population continues on an upward trajectory. Continue cavity tree/cavity inventory monitoring. Continue using established management techniques (ex. artificial cavity provisioning and maintenance, recruitment cluster creation) to further expand the population.
66	Picoides borealis	Red-cockaded Woodpecker	Bird	Bird	I	а	Fo Sa)rests and Woodlands, avannahs	7.1.2, 7.3.2,	Suppression in the Fire Regime / Vegetation Succession /				

	Δ	В	C	D	F	F	G	н	1	Р	T	U	V
1	Scientific Name	Common Namo	Grouping	Type	Tior C		lahitate	Threat Code	Threat Description	Threat_Long	Actions	Working_Lands	Notes
1		Red-throated Loon	Grouping	Туре			arge Tidal Rivers, Estuaries,	Initeat_code		/ e.g., ranavirus in amphibians, rabies in raccoons. /	1. Support tracking studies to determine if migrant and wintering Red-throated Loon (RTLO) forage in the foot print of Offshore Wind (OSW) leases in the central Atlantic Wind Energy Areas <i>before</i> facilities are fully constructed and operational. 2. support additional tracking studies to determine if migrant and wintering RTLO actively avoid OSW facilities <i>after</i> they become fully operational. (3.3.2), 1. Develop a rapid response plan for seabird Highly Pathogenic Avian Influenza and other disease-related mortality/morbidity events that occur during the breeding season. NOTE: this action is intended for all seabird species that breed in Virginia. (8.4.2)		Other potential threats for which no achievable actions have been identified: 9.4.4; 9.2.1; 3.1.2; 5.4.2; 11.2.1; 11.2.2; 11.3.3; 11.3.4
67	Gavia stellata	(winter)	Bird	Bird	IV b	G	Tarine Nearshore	3.3.2, 8.4.2,	Wind Farms / Viral Pathogens / Management/Control of Terrestria Animals / Changes in Vegetation Communities / Perennial Cropping	Deliberately killing individuals of a terrestrial species for human gain that is governed by management measures. E.g., cormorant culling. / Major changes in an ecosystem resulting in changes to vegetation communities distinguished from natural vegetation succession, which may threaten open-country species (Threat 7.3.2). E.g., migration of deciduous trees towards the boreal forest, rising sea levels, desertification, thawing permafrost (in tundra), coral bleaching. / Crops that are associated with less intensive agricultural practices that have less of an ecological impact than do annual crops. E.g., pastures, forage crops, hay, alfalfa, clover.	Evaluate the roles of seed crop damage control programs and roost dispersal programs on population decline of the species(5.1.5), Conduct the following activities for higher-tiered, marsh- nesting avian SGCN, which would in turn benefit marsh-nesting populations of Red-winged Blackbird threatened by sea level rise: 1. purchase and conserve properties in marsh migration zones where upland habitats have a high probablity of transforming into suitable breeding habitat. 2. Manage coastal WMAs that encompass suitable marsh habitats for breeding marsh birds. 3. Monitor as part of regular secretive marsh bird occupancy and breeding productivity monitoring or DWR WMAs that are managed for marsh-nesting birds to evaluate the effectiveness of management strategies. (11.1.1), Coordinate with and support expansion of programs such as the Virginia Grassland Bird Initiative, which conduct research and provide financial incentives to private landowners to adopt BMPs to improve grassland bird productivity (2.1.2)	Breed in fresh or saltwater marshes or in vegetated pond edges. Winter in ag fields, pastures and grasslands.	
68	Agelaius phoeniceus	Red-winged Blackbird	Bird	Bird	IV a	Ti	idal Wetlands,	5.1.5, 11.1.1, 2.1.2	Systems Vegetation Succession / Viral	Natural vegetation succession causing habitat loss for species of early successional habitats. / e.g., ranavirus in amphibians, rabies in raccoons. /	Increase active management of forested lands on public and private lands focused at higher elevations (>1,800 ft elevation) specifically west of the Blue Ridge Mountains. Educate the public or the benefits of young forest habitats for Ruffed Grouse (RUGR) and young forest associated species. (7.3.2), Threat is suspected for West Nile Virus, further evaluation of the effects of the virus on RUGR should be implemented. (8.4.2), Threat is suspected for changes in precipitation in relation to nesting and brood rearing season. Further evaluation is needed to determine if climatic impacts are changing or limiting grouse productivity. (11.4.1)	Five basic cover types required: conifers, mixed conifers and hardwoods, hardwoods, brush, and open fields. Breed and winter in deciduous and mixed hardwood pine forests with brushy, cutover and opens areas important for broods and foraging.	1
69	Bonasa umbellus	Ruffed Grouse	Bird	Bird	III a	G	rasslands, Shrublands	7.3.2, 8.4.2, 11.4.1	Pathogens / Overabundant Rains	Harvesting trees/other forest species in natural environments for timber or fiber outside of plantations (Threat 2.2). Includes cutting and the use of machinery, as well as wood storage and debris management, excluding their transport (Threat 4.1) and associated erosion (Threat 9.3) / Construction and maintenance of channels that drain surface waters in forest environments. Excludes erosion/sedimentation that is associated with this drainage system (Threat 9.3.2). / Major changes in an ecosystem resulting in changes to vegetation communities distinguished from natura vegetation succession, which may threaten open- country species (Threat 7.3.2). E.g., migration of deciduous trees towards the boreal forest, rising sea levels, desertification, thawing permafrost (in tundra), coral bleaching.	The 2014 Management Plan for the Rusty Blackbird (RUBL) in Canada identifes conversion of forested wetlands on its wintering grounds in the southern United States as the most significant factor contributing to past RUBL population declines. Loss and degradation of forested wetlands may occur through timber harvests, modifications to hydological regimes, and through sea level rise and salt water intrusion. These are suspected, but not known, threats in Virginia. Work to mitigate these potential threats through protection and conservation of forested wetlands, both public and private. Add RUBL winter habitat requirements into forested wetland mitigation prescriptions. (5.3, 7.2.5, 11.1.1)	Winter primarily in forested wetlands, but may make use of flooded fields and open upland areas near preferred sources of food such as oak mast.	Expand inland Motus network to support collection of tracking data via Rusty Blackbird nanotag projects in the northeastern U.S., in order to document migratory routes, stopover habitat and migratory connectivity to breeding populations.
70	Euphagus carolinus	Rusty Blackbird (winter)	Bird	Bird	IV c	Fi	orests and Woodlands, Non- idal Wetlands, Urban Lands	5.3, 7.2.5, 11.1.1	Logging and Wood Harvesting / Drainage in Forest Environments / Changes in Vegetation Communiti Changes in Vegetation Communiti Aquatic Plants /	Major changes in an ecosystem resulting in changes to vegetation communities distinguished from natural vegetation succession, which may threaten open-country species (Threat 7.3.2). E.g., migration of deciduous trees towards the boreal forest, rising sea levels, desertification, thawing permafrost (in tundra), coral bleaching. / /	Address impacts of sea level rise as follows: 1. purchase and conserve properties in marsh migration zones where upland habitats have a high probablity of transforming into suitable Saltmarsh Sparrow (SALS) breeding habitat. 2. Manage coastal WMAs that encompass suitable marsh habitats for breeding SALS. 3. Conduct regular SALS occupancy and breeding productivity monitoring on DWR WMAs that are managed for SALS to evaluate the effectiveness of management strategies. NOTE: This benefit Forster's Tern, Laughing Gull and other marsh nesting species. (11.1.1), 1. Improve existing SALS breeding habitat by conducting regular control of phragmites and other invasive plant species at coastal DWR WMAs with suitable SALS breeding habitat. NOTE: this will benefit all marsh nesting birds. (8.1.4)		Other potential threats for which no achievable actions have been identified: 8.2.5; 11.5.2; 11.3.4

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I starting war			-	-	_					Threat Long	Actions	Working Lands	Notes	
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Image: Provide states and states										that is caused by natural erosional processes. To	wintering habitat by placing beach compatible dredge material along shorelines and on existing or	ocean and inshore intertidal	identified: 7.3.3; 8.4.2; 9.2.1; 11.4.2 (drought impacts on prev	
Note: Note:<										be distinguished from the transport of sediments	remnant spits and shoals in the seaside barrier Island complex and in the Chesapeake Bay. (7.3.3,	shorelines, and to a lesser extent	availability); 11.2.2 (salinity shift impacts on prey); 11.3.3 temp	
 A standard Section Control of C										that is associated with tides (Threat 4.3.1), or by	11.1.1)	on tidal mudflats. Sanderlings are	change impacts on prey); 11.5.2	
Image: Source in the second										drainage systems in agriculture (Threat 7.2.5) and		often found foraging along intertida	l	
Note Note <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>forestry (Threat 7.2.6). / Major changes in an</td><td></td><td>shorelines in urban areas. Roosts</td><td></td></th<>										forestry (Threat 7.2.6). / Major changes in an		shorelines in urban areas. Roosts		
2 Australing Note: 1: 0000000000000000000000000000000000										ecosystem resulting in changes to vegetation		on sandy beaches and spits along		
0 And and a part of the second se										communities distinguished from natural vegetation	1	in urban areas, along the barrier		
Image: Processing of the second se										succession, which may threaten open-country		island chain, and on Chesapeake		
And And <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>species (Threat 7.3.2) E.g. migration of deciduous</td> <td></td> <td>Bay islands</td> <td></td>										species (Threat 7.3.2) E.g. migration of deciduous		Bay islands		
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C / Section M Readed system First With M Address years Contract M Contrac							Shorelines, Beaches and Dunes,		Natural Erosion and Sedimentation /					
No Note: In the second distance of the second dista	72	2 Calidris alba	Sanderling (winter)	Bird	Bird IV	a	Tidal Wetlands, Urban Lands	7.3.3, 11.1.1,	Changes in Vegetation Communities /					
N Note: Not										Crops that are associated with less intensive	Coordinate with and support expansion of programs such as the Virginia Grassland Bird Initiative,	Breed most commonly in the	The reasons for declines are not completely understood. Pursue	
Image: Participation statements of the statement of										agricultural practices that have less of an	which conduct research and provide financial incentives to private landowners to adopt BMPs to	western part of the state primarily	collection of ecological and reproductive data in Virginia, as well	
Image: Participant Partitipant Partitante Participant Participant Participant Participant P										agricultural practices that have tess of an	improve grassland hird productivity $(2, 1, 2)$. Research the impacts of pecticides on prev base and	in pactures and haufields, but may	as data on migratory connectivity via coordinated multi-state	
No. Note: No.										ecological impact than do annual crops. E.g.,	improve grassiand bird productivity (2.1.2), research the impacts of pesticides on prey base and	in pastures and naynetus, but may	as data on migratory connectivity via coordinated multi-state	
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No Number of the state is a state if t										Includes the use of inputs for controlling crop		areas.	extent of mining factors.	
Displace Description Description <thdescription< th=""> <thdescription< th=""> <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td>Grasslands, Transportation</td><td></td><td>Perennial Cropping Systems /</td><td>pests. E.g., herbicides, insecticides, fungicides. /</td><td></td><td></td><td></td></t<></thdescription<></thdescription<>							Grasslands, Transportation		Perennial Cropping Systems /	pests. E.g., herbicides, insecticides, fungicides. /				
N Note the point of the point	73	Passerculus sandwichensis	Savannah Sparrow	Bird	Bird II	а	Networks	2.1.2, 9.3.3,	Herbicides and Pesticides /					
N Note No										Removal, transport and deposition of sediments	Pursue dune stabilization in areas that support wintering individuals and where it is feasible to do		Virginia plays a significant role in the conservation of this isolated,	
N Normalization										that is caused by natural erosional processes. To	so; such projects should be informed by research on the subspecies' winter ecology (for ex. to		specialized subspecies, which breeds primarily on Cape Sable	
Normalized by the second definition of t										he distinguished from the transport of sediments	guide plant species selected for stabilization efforts or included in beach plantings) (7.3.3)		Island in Nova Scotia, Canada, Support ongoing investigations of	
Res Res <th res<="" td="" th<=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>that is appropriated with tides (Throat 4.2.1) or by</td><td>0</td><td></td><td>Inswich Sparrow winter ecology to identify key habitat</td></th>	<td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>that is appropriated with tides (Throat 4.2.1) or by</td> <td>0</td> <td></td> <td>Inswich Sparrow winter ecology to identify key habitat</td>										that is appropriated with tides (Throat 4.2.1) or by	0		Inswich Sparrow winter ecology to identify key habitat
Normality spectral as synchronic as support of the second secon										that is associated with tides (Threat 4.3.1), of by			characterics which will inform management and conservation	
Passencial standardersis Description Basencial standardersis Description Description <thdescrinternation< th=""> Description</thdescrinternation<>										drainage systems in agriculture (Inreat 7.2.5) and			offorts to maintain a supply of high quality wintering habitat for	
Posteriol Posteriol <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>forestry (Threat 7.2.6). / /</td><td></td><td></td><td>the subspecies</td></t<>										forestry (Threat 7.2.6). / /			the subspecies	
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No Note interface Note interface Note interface Note interface Address inspace Addres inspace Address inspace	74	1 princeps	(Ipswich subspecies)	Bird	Bird I	а	Beaches and Dunes	7.3.3	Natural Erosion and Sedimentation / /	/				
k k										Major changes in an ecosystem resulting in	Address impacts of sea level rise as follows: 1. Increase the elevation of mudflats used by foraging		Other potential threats for which no achievable actions have been	
k k										changes to vegetation communities distinguished	and roosting Short-billed Dowitcher (SBDO) that are in danger of being lost to sea level rise through	1	identified: 11.2.2 (impacts on SBDO prey); 11.3.3 (impacts on	
Image: state Number state <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>from natural vegetation succession, which may</td><td>the thin layer deposition of dredge material obtained from adjacent navigational channels. 2.</td><td></td><td>SBDO prey); 11.3.4 (impacts on SBDO prey) 9.2.1; 8.2.5 (predation</td></th<>										from natural vegetation succession, which may	the thin layer deposition of dredge material obtained from adjacent navigational channels. 2.		SBDO prey); 11.3.4 (impacts on SBDO prey) 9.2.1; 8.2.5 (predation	
Z unorderenus ginous Storballed Dwitcher Stor										threaten open-country species (Threat 7.3.2) E g	Evaluate the effectiveness of this technique by conducting before and after shorebird surveys to		by breeding PEFA)	
Image: Source Since Sin										migration of deciduous troos towards the boreal	quantify differences in shorebird use and by conducting before and after benthic invertebrate			
Image: Not-bilded Dowitcher Short-bilded Dowitcher										fingration of deciduous trees towards the boreat	surveys and sampling to measure differences in prev types, density and availability. (11.1.1)			
No Short-billed Dowther (ransient) Bind Bind No Changes in Vegetation Communities/ (ransient) Permanents/ (ransient) Adjust changes in a ecosystem resulting in changes to vegetation communities/ (ransient) Adjust changes in a ecosystem resulting in changes to vegetation communities/ (ransient) Adjust changes in a ecosystem resulting in changes to vegetation communities/ (ransient) Addres loss of high marsh shrub habitat in marshe as follows: 1. Develop, secure funding for market algust poject: miching to gestation and change to vegetation communities/ (ransient) Number changes to vegetation communities/ (ransient) Addres loss of high marsh shrub habitat in marshe as follows: 1. Develop, secure funding for market algust poject: miching to gestation and changes to vegetation communities distinguished (ransient) Number changes to vegetation communities distinguished (ransient) Addres loss of high marsh shrub habitat in marshes as follows: 1. Develop, secure funding for market algustom di changes to vegetation communities distinguished (ransiente) Addres loss of high marsh shrub habitat in marshes as follows: 1. Develop, secure funding for distinguished discustees distinguished distinguished distinguished distinguished distinguished (ransiente) Addres loss of high marsh shrub habitat in marshes as follows: 1. Develop, secure funding for distinguished distinguished distinguished distinguished distinguished distinguished distinguished (ransiente) Addres loss of high marsh shrub habitat in marshes Addres loss of high marsh shrub habitat in marshes as follows: 1. Develop, secure funding for distinguished distinguished distinguished distinguished distinguished disto distinguished distinguished dis										forest, rising sea levels, desertification, thawing	······································			
Number Note Short-Nilled Dowther Ind Wetlands, Taid Creeks and Wetge at the Damper in Megaration Communities of Marginal Andreads Address at the Marginal Andread Short Andread Shot Andree Short Andread Short Andread Short Andread Short							Shorelines, Beaches and Dunes,			permafrost (in tundra), coral bleaching. / /				
72 Immoderomus grisuus Bird 8 Ind V a Nivers 1.1.1 / (Access) (Acces			Short-billed Dowitcher				Tidal Wetlands, Tidal Creeks and		Changes in Vegetation Communities /					
R B F B F B F B F B F B F B F B F B F B F B F B F B F	75	5 Limnodromus griseus	(transient)	Bird	Bird IV	a	Rivers	11.1.1	1					
R F										Major changes in an ecosystem resulting in	Address loss of high marsh shrub habitat in marshes as follows: 1. Develop, secure funding for,	In Virginia, known to nest on	Other potential threats for which no achievable actions have been	
R R										changes to vegetation communities distinguished	implement and evaluate a pilot project involving thin layer deposition of dredge material obtained	artifical islands in the Hampton	identified: 11.5.2; 11.2.2 (salinity impacts on prey); 11.3.3 (temp	
76 Erreta thula Show Eret Bid In Now Eret Bid Bid Bid Chapes in Vegeta for Communities / Human Intrusions and Disturbance / Human										from natural vegetation succession which may	from local navigational channels to increase the elevation of seaside and Chesapeake Bay marshes	Boads area adjacent to a major	impacts on prey)	
result										throaton open country species (Threat 7.2.2) E d	that used to support wading bird colonies, including Snowy Egret (SNEG), but no longer do because	interstate highway. Forages in		
76 Erret a hula Now Yert Bird Bird<										uneaten open-country species (nneat 7.5.2). L.g.,	of the disappearance of salt tolerant shrubs e.g. lvg frutescens. Baccharis halimifolia. Morella			
76 Erretta thula Snowy Eret Bid Bid<										migration of deciduous trees towards the boreat	cerifera) due to subsidence and frequent tidal inundation 2 A second component of this project	snallow waters of ponds, lakes,		
r r F										forest, rising sea levels, desertification, thawing	may include the planting of decired shrubs if reastablishment dessa't occur naturally 2. Evaluate	rivers, impoundments and at the		
76 Erect a thula Snowy Erect Bird II II 6.3.1 From a thylices on the fact means in places on the data in simplex on										permafrost (in tundra), coral bleaching. / Threats	the effectiveness of this technicus and its impacts on the marsh hudroless and electered wildlife	edges of fresh, brackish and		
resurces) that disturb, alter, or destroy habitats and their species. / Research tactivities that are governels / Research tactivities that are research fisheries requiring mortality, trampling by research tactivities requiring mortality, trampling by governels / Research Activities research fisheries requiring mortality, trampling by research tactivities requiring mortality, trampling by succeptible to observer bias. (63.1) 76 Ererta thula Snow Erert Bird Bird Indoundents 11.1.1.6.6.3.1 Research Activities Research Activities Research Activities										from activities (unrelated to the use of biological	the enectiveness of this technique and its impacts on the marsh hydrology and plant and wildlife	saltwater marshes		
A Feretta thula Snow Egrett Bird II a d III.1.6.6.3.1 Research Activities A fere search Activities A fere search Activities A fere search Activities SNeE Colonies that are located on unprotected private and public markes and islands in the governed by management measures that can affect and species. / Research activities that are governed by management measures that can affect and species by causing disturbance, by collecting individual, or by degrading the environment. E.g., Tidal Creeks and Rivers, Large Tidal Rivers, Large Tidal Rivers, Large, Tidal Wetlands,										resources) that disturb, alter, or destroy habitats	communities over the long term. (11.1.1), 1.Gain permission to post bird closure signs around key			
76 Erretta thula Snowy Erret Bird Bird I a Impoundments 11.1.1.6.6.3.1 Research fictories Changes in Vegetation Communities / Human Incustoris and Disturbance, Kereate Bay. 2. Post bir di leasible is around key SNEG colonies located on VMRC-owned secale marsures that can alter individual, or by degrading the environment. E.g., research fisheries requiring mortality, trampling bir research teams. Changes in Vegetation Communities / Human Incustoris and Disturbance, Kereate Bay. 2. Post bir di leasible anagement measures that can alter secale marsures that can alter individual, or by degrading the environment. E.g., research teams. Changes in Vegetation Communities / Human Incustoris and Disturbance, Network MEC colonies located on VMRC-owned secale marsures that can alter individual, or by degrading the environment. E.g., research teams. Changes in Vegetation Communites / Human Incustoris and Disturbance,										and their species. / Research activities that are	SNEG colonies that are located on unprotected private and public marshes and islands in the			
76 Egretta thula Snowy Egret Bird II a b <	1									governed by management measures that can affect	Chesapeake Bay. 2. Post bird closure signs around key SNEG colonies located on VMRC-owned			
A generation A generation <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>province by namagement incasting that call all the</td><td>seaside marshes that are vulnerable to human disturbance. 3. Work with CPOs to establish a law</td><td></td><td></td></td<>										province by namagement incasting that call all the	seaside marshes that are vulnerable to human disturbance. 3. Work with CPOs to establish a law			
76 Earetta thula Snow Earet Bird II a Individual, or by degrading the environment. E.g., research fisheries requiring mortality, trampling by research fisheries requiring mortality, trampling by research teams. accurate breeding wading bird survey methodology that also avoids or minimizes observer research fisheries requiring mortality, trampling by research teams. accurate breeding wading bird survey methodology that also avoids or minimizes observer distributions on the survey methodology that also avoids or minimizes observer teams. 76 Earetta thula Snow Earet Bird II a Impoundments 11.1.1.6.6.3.1 Research Activities Heasearch Activiti										species by causing disturbance, by collecting	enforcement presence at these posted sites. (6), 1. Design, implement and evaluate a more			
A proprint of the propris of the proprint of the proprint of the proprint of th	1						Shoreunes, Beaches and Dunes,			individual, or by degrading the environment. E.g.,	accurate breeding wading bird survey methodology that also avoids or minimizes observer			
76 Egretta thula Snowy Egret Bird Bird II a Impoundments 11.1.6.6.3.1 Research Activities							Tidal Creeks and Rivers, Large			research fisheries requiring mortality, trampling by	disturbance. The current adult flush count method has never been tested for accuracy and is highly	,		
76 Egretta thula Snowy Egret Bird Bird II a Impoundments 11.1.6.6.3.1 Research Activities							Tidal Rivers, Lakes, Ponds, Non-			research teams.	susceptible to observer bias. (6.3.1)			
76 Earetta thula Snowy Egret Bird Bird II a Impoundments 11.1.6.6.3.1 Research Activities							tidal Wetlands, Tidal Wetlands,							
76 Egretta thula Snowy Egret Bird Bird II a Impoundments 11.1.1.6.6.3.1 Research Activities							Urban Lands, Transportation		Changes in Vegetation Communities /					
76 Egretta thula Snowy Egret Bird Bird II a Impoundments 11.1.1.6.6.3.1 Research Activities							Networks, Artificial		Human Intrusions and Disturbance /					
	76	Egretta thula	Snowy Egret	Bird	Bird II	а	Impoundments	11.1.1, 6, 6.3.1	Research Activities					

	А	В	С	D	E	F	G	Н	L	р	Т	U	V
										Threat_Long	Actions	Working_Lands	Notes
1	Scientific_Name	Common_Name	Grouping	Туре	Tier	COR	Habitats	Threat_Code	Threat_Description				
										Major changes in an ecosystem resulting in	Address loss of high marsh shrub habitat in marshes as follows: 1. Develop, secure funding for,		Other potential threats for which no achievable actions have been identified: 11.5.2: 11.2.2 (calinity impacts on prov): 11.2.2 (tomp
										from natural vegetation succession, which may	from local navigational channels to increase the elevation of seaside and Chesapeake Bay marshes		impacts on prev)
										threaten open-country species (Threat 7.3.2) E g	that used to support wading bird colonies, including Tricolored Heron (TRHE), but no longer do so		
										migration of deciduous trees towards the boreal	because of the disappearance of salt tolorant shrubs e.g., Iva frutescens, Baccharis halimifolia,		
										forest, rising sea levels, desertification, thawing	Morella cerifera) due to subsidence and frequent tidal inundation. 2. A second component of this		
										permafrost (in tundra), coral bleaching. / Threats	project may include the planting of desired shrubs if reestablishment doesn't occur naturally. 3.		
										from activities (unrelated to the use of biological	Evaluate the effectiveness of this technique and its impacts on the marsh hydrology and plant and		
										resources) that disturb, alter, or destroy habitats	around key TRHE colonies that are located on unprotected private and public marshes and islands		
										and their species. /	in the Chesapeake Bay. 2. Post bird closure signs around key TRHE colonies located on VMRC-		
											owned seaside marshes that are vulnerable to human disturbance. 3. Work with CPOs to establish		
											a law enforcement presence at these posted sites. (6), 1. Improve existing wading bird breeding		
											habitat by conducting regular control of phragmites and other invasive plant species at coastal		
											DWR WMAS with suitable TRHE breeding habitat. NOTE: this will benefit all nesting wading birds.		
									Changes in Vegetation Communities /		(0.1.4)		
							Shorelines, Beaches and Dunes,		Human Intrusions and Disturbance /				
77	Egretta tricolor	Tricolored Heron	Bird	Bird	II	a	Tidal Wetlands	11.1.1, 6, 8.1.4	Aquatic Plants				
										11	Pursue collection of ecological and reproductive data in Virginia, as well as data on migratory		The reasons for declines are not completely understood. Pursue
											connectivity via coordinated multi-state projects.		collection of ecological and reproductive data in Virginia, as well
													as data on migratory connectivity via coordinated multi-state
								No specific identified					extent of limiting factors; the Amazon Basin may be of particular
								threats, see notes for					significance for this species.
78	Catharus fuscescens	Veery	Bird	Bird	ш	b	Forests and Woodlands	more information,	11				
										Crops that are associated with less intensive	Coordinate with and support expansion of programs such as the Virginia Grassland Bird Initiative,	May breed in short-grass meadows,	The reasons for declines are not completely understood. Pursue
										agricultural practices that have less of an	which conduct research and provide financial incentives to private landowners to adopt BMPs to	pastures, hayfields, cultivated grain	collection of ecological and reproductive data in Virginia, as well
										ecological impact than do annual crops. E.g.,	improve grassland bird productivity (2.1.2), Research the impacts of pesticides on prey base and	fields and weedy roadsides.	as data on migratory connectivity via coordinated multi-state
										pastures, forage crops, hay, alfalfa, clover. /	Impact on grassiand bird communities (9.3.3)		projects, as a path toward investigating geographic and temporal
							Creasianda Transportation		Devennial Granning Systems /	Includes the use of inputs for controlling crop			extent of infiniting factors.
79	Pooecetes gramineus	Vesper Sparrow	Bird	Bird		a	Networks	212933	Herbicides and Pesticides /	pesis. E.g., herbicides, insecticides, fungicides. 7			
			biid	Dird						Major changes in an ecosystem resulting in	Address impacts of sea level rise as follows: 1. purchase and conserve properties in marsh		Other potential threats for which no achievable actions have been
										changes to vegetation communities distinguished	migration zones where upland habitats have a high probablity of transforming into suitable Virginia		identified: 8.2.5; 11.2.2 (salinity impacts on prey); 11.5.2; 11.3.4
										from natural vegetation succession, which may	Rail (VIRA) breeding habitat. 2. Manage coastal WMAs that encompass suitable marsh habitats for		
										threaten open-country species (Threat 7.3.2). E.g.,	breeding VIRA. 3. Conduct regular VIRA occupancy and breeding productivity monitoring on DWR		
										migration of deciduous trees towards the boreal	www.s. that are managed for marsh-nesting birds to evaluate the effectiveness of management strategies. NOTE: This will benefit Clapper Bail. Forster's Tern, Laughing Gull and other marsh		
										forest, rising sea levels, desertification, thawing	nesting species. (11.1.1)		
							Non-Tidal Wetlands Tidal		Changes in Vegetation Communities /	permatrost (in tundra), coral bleaching. / /			
80	Rallus limicola	Virginia Rail	Bird	Bird	ш	b	Wetlands,	11.1.1	/				
										11	Pursue collection of ecological (including breeding habitat associations) and reproductive data in		Work to gain a better understanding of the subspecies' status and
											Virginia, as well as data on migratory connectivity.		distribution in Virginia as a first step toward evaluating
													factors are currently unknown. Pursue collection of ecological
													(including breeding habitat associations) and reproductive data in
													Virginia, as well as data on migratory connectivity via coordinated
													multi-state projects or as a stand-alone effort in Virginia, as a path
								No specific identified					toward investigating geographic and temporal extent of limiting
		Wayne's Warbler						threats, see notes for					factors.
81	Setophaga virens waynei	(subspecies)	Bird	Bird	1	b	Forests and Woodlands	more information,	11				
1										/ Major changes in an ecosystem resulting in	1. Support trackinging studies to determine if Whimbrel spring and fall migratory flight paths		Address potential impacts to WHIM prey as follows:1. Conduct
1										changes to vegetation communities distinguished	Intersect the current VA Offshore Wind (USW) facilility, other VA OSW leases, and OSW leases in other Atlantic coast Wind Energy Areas. (3.3.2). Address impacts of soa lovel rise as follows: 1		alet studies using a variety of techniques (e.g., stable isotope analyses DNA analyses on feeal samples visual observations of
1										throaten open country encodes (Threat 7.2.2)	Increase the elevation of mudflats used by foraging and roosting Whimbrel (WHIM) that are in		foraging behavior) to determine the impacts of climate change on
1										migration of deciduous trees towards the boroal	danger of being lost to sea level rise through the thin layer deposition of dredge material obtained		WHIM prey availability and selection. (11.3.3, 11.3.4), Other
										forest, rising sea levels, desertification thawing	from adjacent navigational channels. 2. Evaluate the effectiveness of this technique by conducting		potential threats for which no achievable actions have been
1										permafrost (in tundra), coral bleaching. /	before and after shorebird surveys to quantify differences in shorebird use and by conducting		identified: 11.2.2 (impacts on WHIM prey); 11.3.3 (impacts on
1											before and after benthic invertebrate surveys and sampling to measure differences in prey types,		WHIM prey); 11.3.4 (impacts on WHIM prey) 9.2.1
1											density and availability. (11.1.1), Address potential impacts to WHIM prey as follows:1. Conduct		
1											samples, visual observations of foraging behavior) to determine the impacts of climate change on		
1											WHIM prey availability and selection. (11.2.2)		
									Wind Forme / Changes in Vegetation				
82	Numenius phaeopus	Whimbrel (transient)	Bird	Bird	ш	b	Shorelines, Beaches and Dunes	3.3.2, 11.1.1, 11.2.2	Communities / Changes in salinity				
F								, _,		Major changes in an ecosystem resulting in	Address impacts of sea level rise as follows: 1. Increase the elevation of mudflats used by foraging		Other potential threats for which no achievable actions have been
1										changes to vegetation communities distinguished	and roosting Willet (WILL) that are in danger of being lost to sea level rise through the thin layer		identified: 7.3.3; 8.1.1 (introduced PEFA impacts); 8.4.2; 9.2.1;
1										from natural vegetation succession, which may	deposition of dredge material obtained from adjacent navigational channels. 2. Evaluate the		11.4.2 (drought impacts on prey availability); 11.2.2 (salinity shift
1										threaten open-country species (Threat 7.3.2). E.g.,	in shorebird use and by conducting before and after henthic invertebrate surveys and sampling to		impacts on prey); 11.3.3 temp change impacts on prey); 11.5.2
										forest rising sea lovels, desortification, the wing	measure differences in prey types, density and availability. 3. Enhance and increase WILL roosting		
							Shorelines, Beaches and Dunes			permafrost (in tundra), coral bleaching / /	habitat in the seaside marshes by increasing the elevation and footprint of eroding shell rakes.		
1							Tidal Creeks and Rivers, Tidal		Changes in Vegetation Communities /	,	(11.1.1)		
83	Tringa semipalmata	Willet (Western) (winter)	Bird	Bird	IV	а	Wetlands	11.1.1	1				

	А	В	С	D	E F	G	Н	L	Р	Т	U	V
									Threat_Long	Actions	Working_Lands	Notes
1	Scientific_Name	Common_Name	Grouping	Туре	Tier CO	R Habitats	Threat_Code	Threat_Description				
									Threats from activities (unrelated to the use of	1. Continue to post bird closure signs around key shorebird and seabird nesting areas on the barrie	r	NOTE: WIPL nesting activity in VA is currently confined to the
									biological resources) that disturb, alter, or destroy	islands (note: this action will benefit all nesting shorebirds and seabirds on the barrier islands). 2.		barrier islands located seaward of the lower Delmarva Peneinsula.
									habitats and their species. / / e.g., racoons, striped	Continue to engage in various forms of outreach and education (e.g., printed pamphlets, <i>Explore</i>		All but one of the islands (i.e., Wallops Island) are under
									skunks, foxes, coyotes.	our Seaside website, presentations, social media) which conveys the importance of the barrier		conservation ownership and protected from development in
										islands to birds and other wildlife and clearly outlines island use policies. 3. Increase the presence		perpetuity.
										of law enforcement and volunteer stewards on the barrier islands, especially during peak island us	e	Other potential threats for which no achievable actions have been
										periods (e.g., weekends and summer holidays) to keep up with the annual increases in the number		identified:: 3.3.2; 7.3.3; 8.1.1 (introduced breeding PEFA on the
										of people visiting the islands. (6), 1. Conduct phragmites control on key Wilson's Plover (WIPL)		outer coast, coyotes on the barrier islands); 11.4.2 (drought
										nesting islands in areas where back barrier stands of phragmites impede brood access to backside		impacts on prey availability); 11.3.3; 11.5.1; 11.5.2
										foraging areas. 2. Monitor the effectiveness of limited phragmites removal by placing trail cameras		
										along the edges of adjoining mudflats combined with intensive monitoring of WIPL breeding		
										productivity. 3. If phragmites removal improves brood access to backside foraging areas, continue		
										phragmites control, as needed. (8.1.4), 1. Continue to support mammalian (raccoons, foxes,		
										coyotes) management efforts on barrier islands that support the majority of VA's WIPL breeding		
										population. 2. Support and conduct various forms of avian predator management (e.g., audio		
										deterrents, harrassment, effigies, lethal removal) on islands where plover productivity monitoring		
										efforts indicate the need for the limited removal of gulls, corvids, great horned owls and/or other		
										predatory species. 3. Continue to monitor ghost crab activity around WIPL nests and engage in		
										limited removal of crabs if the data support such an action. (8.2.5)		
								Human Intrusions and Disturbance /				
								Aquatic Plants / Increased Predation				
84	Charadrius wilsonia	Wilson's Plover	Bird	Bird	I a	Shorelines, Beaches and Du	nes 6, 8.1.4, 8.2.5	by Mesopredators				
									Harvesting trees/other forest species in natural	Given that breeding grounds habitat loss may be the primary factor limiting Wood Thrush		participate in 2024-2026 range-wide Wood Thush Motus tagging
									environments for timber or fiber outside of	populations in Virginia (Rushing et al. 2016), pursue habitat management for the species; this can		project in order to refine information on migratory connectivity,
									plantations (Threat 2.2). Includes cutting and the	be accomplished via the Appalachian Mountains Joint Venture focal areas initiative west of the		as well as collect data on timing and departure dates and survival
									use of machinery, as well as wood storage and	Blue Ridge Mountains, and via other mechanisms elsewhere in the state for this widely distributed		across the full annual cycle. This will position Virginia to better
									debris management, excluding their transport	species. Pursue development of regional forestry Best Management Practices (BMPs) for the		support Southern Wings projects targeting the species in Central
									(Threat 4.1) and associated erosion (Threat 9.3) / /	species in order to maximize efficacy of current Wood Thrush forestry guidelines. (5.3)		America.
85	Hylocichla mustelina	Wood Thrush	Bird	Bird	IV a	Forests and Woodlands	5.3	Logging and Wood Harvesting / /				
									Natural vegetation succession causing habitat loss	This is a suspected, but not known, threat. Pursue multiple strategies to ensure adequate supply of	f Breeds in moist brushy areas near	The reasons for declines are not completely understood. Pursue
									for species of early successional habitats. / /	early-successional conditions across habitat types to meet reproductive needs of the species.	streams, ponds and lakes.	collection of ecological and reproductive data in Virginia, as well
										(7.3.2)	Common in orchards, blueberry	as data on migratory connectivity via coordinated multi-state
											bogs, fence rows and cutover	projects, as a path toward investigating geographic and temporal
						Forests and Woodlands,					powerline R-O-Ws.	extent of limiting factors.
86	Setophaga petechia	Yellow Warbler	Bird	Bird	lli b	Shrublands	7.3.2	Vegetation Succession / /				
									Natural vegetation succession causing habitat loss	This is a suspected, but not known, threat. Pursue multiple strategies to ensure adequate supply of	f Breed in areas of dense shrubbery,	The reasons for declines are not completely understood. Pursue
									for species of early successional habitats. / /	early-successional conditions across habitat types (regenerating clearcuts, shrubby pastures, right-	including abandoned farm fields,	collection of ecological and reproductive data in Virginia, as well
									-	of-ways, abandoned fields, restored strip mines, young pine plantations, vegetated fencerows, etc.	clearcuts, powerline corridors,	as data on migratory connectivity via coordinated multi-state
										to meet reproductive needs of the species. (7.3.2)	fencerows, forest edges and	projects, as a path toward investigating geographic and temporal
											openings, swamps, and edges of	extent of limiting factors.
											streams and ponds.	
						Forests and Woodlands,						
87	Icteria virens	Yellow-breasted Chat	Bird	Bird	IV a	Shrublands, Savannas	7.3.2	Vegetation Succession / /				