### Bats, and Birds, and Bridges, and BrM

Rhode Island Department of Transportation Bridge Natural Resources Unit(NRU), acting under the federal migratory bird treaty act and adopting language from Indiana department of transportation's inspection manual and VDOT's guidelines for the northern long-eared bat. NRU decided that seeing that bridge inspector were out at bridges a lot more than they were that It would be easier for us to track their information in our system if there were any Bats or Migratory Bird at our bridge.

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### What to do first

- 1: Decide if it is a new Tab or if you are adding on to one
- 2: What type of information. Per Inspection or a static field Inspections would go in USERINSP and static would go in USERBRDG tables

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3: Number and type of fields that you need to add to the tables

#### RIDOT

#### Preliminary Bat Inventory Guidelines for Bridge Inspectors

#### **RIDOT** Natural Resources Unit

Favorable Characteristics

Adapted from the Indiana Department of Transportation 2010 Bridge Inspection Manual, the Bernardin, Lochmueller and Associates 2007 document, and VDOT's Guidelines

The northern long-eared bat was designated as a threatened species under the federal Endangered Species Act on May 4, 2015. This was primarily due to the threat posed by white-nose syndrome, a fungal disease that has devastated many bat populations in the U.S.

Many species of bats, including the northern long-eared bat, will roost on bridges during their active season. During the active season, the summer roosting period can be anywhere from mid-April to mid-September. Bats are unlikely to use bridges during their winter inactive hibernation period, which usually occurs between mid-September and mid-April. Caution should be used with these time frames, depending upon seasonal variations in climate.

Bats typically roost in any cave-like cavity on a bridge structure, often located at least 4 feet above the ground. They tend to prefer bridg below median joints. The underside of bridge deck joints should be inspected up close with a flashlight. Other potential roosting spots it hang from small cracks or surface irregularities on concrete structures, including box culverts, or from connections on stee bridges. Bri Aside from seeing bast directly, bridge inspectors should look for other evidence of bats, such as high-pitched squeaking or chiping con caps or abuttent bearing seats below deck joints. Bat droppings may also be present on the slopes below median joints. Another bat clu

RIDOT is required to consider bat species that are protected by the Endangered Species Act and avoid activities that would take or hara preliminary indicators intended to determine if any bat species are using these. Presence of any bat species, or indications of their pre that modify or remove roost potential on bridges or that would disturb roosting bats.

Individuals inspecting bridges should employ appropriate safety measures in conducting these reviews and avoid touching any bats.

#### RIDOT

#### Preliminary Migratory Bird Inventory Guidelines for Bridge Inspectors

#### **RIDOT Natural Resources Unit**

Most birds are protected under the federal Migratory Bird Treaty Act (MBTA), which prohibits the take (including killing, capturing, selling, trading and transport) of protected migratory bird species. Some species of birds nest under highway bridges on walls or beams, typically near waterways or reservoirs. Active nests are most likely to be found during the nesting season, which can last from early spring through the fall season (April – September). We recommend caution when conducting activities during the active season. If conducting inspections during the active season, please do not move or handle nests if found.

nost common protected bird to nest on bridges. In particular, inspectors should look for two types of swallow ws and barn swallows. Cliff swallow nests have a distinctive rounded top, as shown in Appendix A. Cliff ny nesting bird and there may be several to hundreds under one bridge. Cliff swallows commonly nest in large erside of bridges located over or near water. Cliff swallow nests are made from mud pellets and are shaped like a gated entrance tube. Barn swallows do not nest in colonies. Their nests are generally found alone and the shape is 1 in Appendix A. Barn swallows nest almost exclusively on man-made structures (such as bridges). Barn swallow e an open-top cup, and are made from mud mixed with grass (typically with a grass or feather lining).

#### Appendix A: Common Bridge Nesters PROTECTED



1 EALTER TABLE dbo.USERBRDG ADD CON\_PLANS CHAR(1) NULL,CAD CHAR(1) NULL,DES\_CAL CHAR(1) NULL,SHOP\_PL CHAR(1) NULL,JS CHAR(1) NULL,PL\_NOTE VARCHAR(2000)
2 ALTER TABLE dbo.USERBRDG ADD PHAS\_CON CHAR(1) NULL,PHAS\_1 datetime,PHAS\_2 datetime,PHAS\_3 datetime,DES\_CUL VARCHAR(32),CON\_CON\_VARCHAR(32)
3 ALTER TABLE dbo.USERBRDG ADD PHAS\_1con datetime,PHAS\_2con datetime,PHAS\_3con datetime,PHAS\_000 NULL;
4 ALTER TABLE dbo.USERBRDG ADD DES\_BI\_BUL CHAR(1) NULL,SOW\_LN\_LG\_TEM\_CHAR(1) NULL,OSOW\_TRA\_CON\_DEV\_VARCHAR(32),OSOW\_MIN\_NID\_numeric(5, 2),OSOW\_REST
5 ALTER TABLE dbo.USERBRDG ADD OSOW\_LN\_REST\_CHAR(1) NULL,OSOW\_LN\_LG\_TEM\_CHAR(1) NULL,OSOW\_TRA\_CON\_DEV\_VARCHAR(32),OSOW\_MIN\_NID\_numeric(5, 2),OSOW\_REST
6 ALTER TABLE dbo.USERBRDG ADD OSOW\_NOTE\_VARCHAR(2000) NULL;

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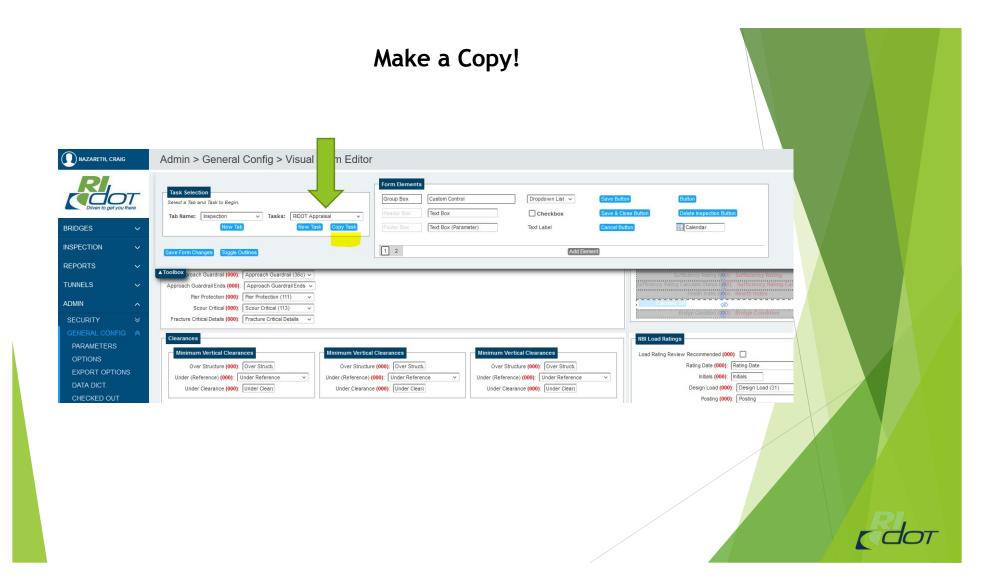
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T Statistics		9BC446827A094	2020-10-22 17:5	FCA9A5B12895	2020-11-02 12:1	F764197F1F604	NULL	0	0	0	0	NULL	0	0	0
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## Letting BrM know where the new data is going to be stored. Better known as the *DATA DICT*

Admin > General Config > Data Dict. Select Table Name Select Column Name pon\_valdn\_set\_values Select a Column Name: bats\_droppings pon\_valdn\_type Edit Details pont\_work pontlog bats\_droppings Col Alias: V2 Convert: pri\_fundsrc prj\_prjfund Data Type: char Width: prj\_progfund 0 0 Allow Nulls Decimal Places pri programs prj\_witems Ν Unique Key: Position: progelem -1 NBI Code: Val Type: progfile projects Val Attr1: -1 Val Attr2: rehabrule Sys. Field: -Sys. Default: rehabsets roadway Key Attr1: N Unique Field: bats droppings scenario scenelem Help ID: -1 🗘 Pair Code: -1 -1 :: -1 [1] scenparam Conversion Rules: -1 SNotes: This is table USERINSP column BATS DROPPINGS scoperule scopesets statedfs statmdls structure unit Include on Custom t group assignment tmp\_witems Notes: This is table USERINSP column BATS\_DROPPINGS ui\_app\_obj\_map ui\_obj\_attr\_classes ui\_obj\_attr\_values ui\_obj\_classes useracc userbrdg userinsp useroles userprefs userprefsreg userproj userrway users userstrunit Add/Refresh Table Refresh userinsp

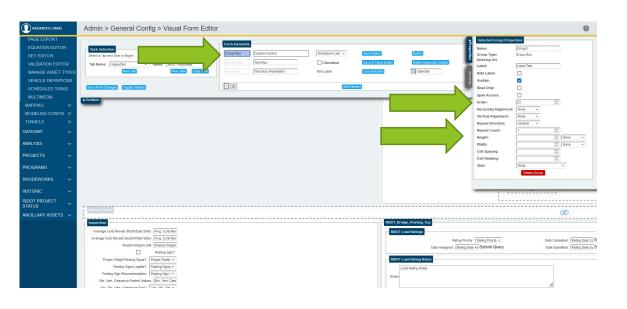




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# Where to put It

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# Adding a box

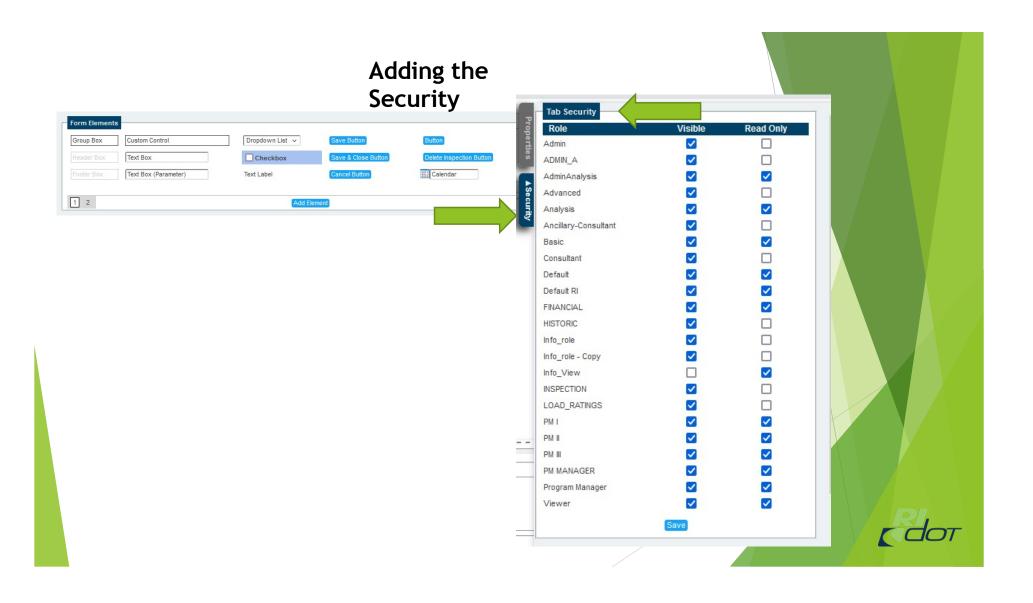
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#### () NAZARETH, CRAIG Admin > General Config > Visual Form Editor 0 Form Elemen Task Selection Select a Tab and Ti Dropdown List 🐱 Group Box Button Group Box o Begin Text Box Checkbox Delete Tab Name: hsp v Tasks: RDOT Apprais Label Text abel: Calendar New Tab New Task Text Box (Parameter) Text Label 183k Hide Label: /isible: < 1 2 Add Element Read Only: Span Across: MULTIMEDIA Order: MAPPING Horizontal Alignment: None Vertical Alignment: None Repeat Direction: Vertic Repeat Count: Height: Width: Cell Spacing: Cell Pacing: None None None V ANALYSIS PROJECTS RHODEWORKS Ø RIDOT\_Bridge\_Posting\_Top Inspection Average Curb Reveal (NorthEast Side): Average Curb Reveal (SouthWest Side): [Average Curb Reveal PIDOT Lord P ..... Rating Priority: Rating Priority V Date Assigned: Rating Date As Submit Query Date Completed: Rating Date Co S Date Submitted: Rating Date Su S Posting Sign? Proper Weight Posting Signs?: Proper Postin v Posting Signs Legeble?: Posting Signs v Posting Sign Recommendation. Posting Sign i Nin. Vert. Clearance Posted Values: Min. Vert. Clear Adv. Min. Vart. Planeman Sign?: Editer. Min. Vart v

# Adding a box

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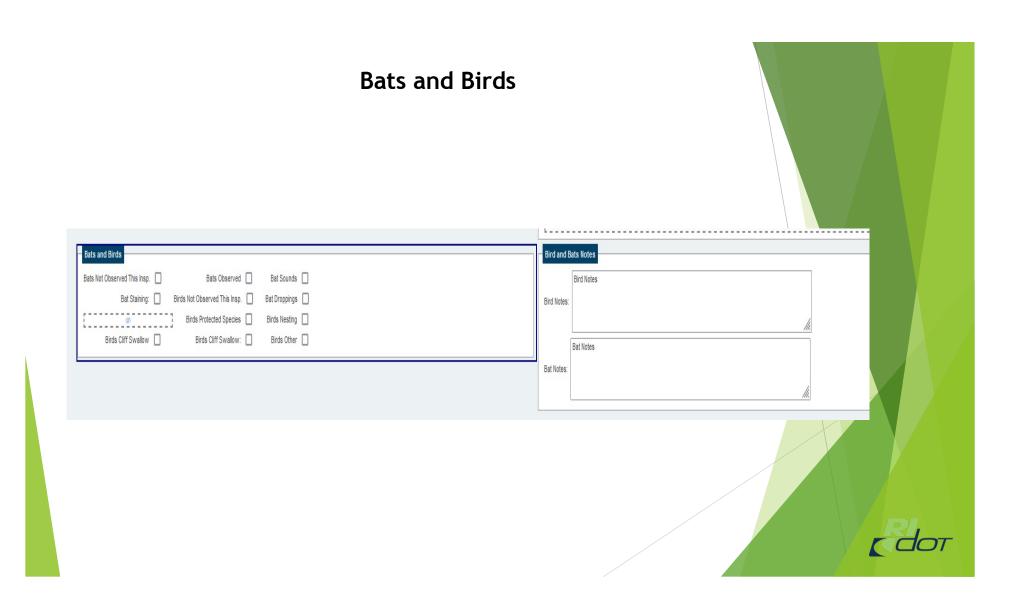


### Other Boxes With Parameters

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	Bats and Birds	
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	Bats an	d Birds	
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PROJECTS ~	Average Curb Reveal (North/East Side);         6.00         n           Average Curb Reveal (South/West Side);         5.50         n           Posted Weight Limit;         ton	Ribor Load Ratings Rating Prorty: null (FIX PAF  Date Assigned: 8/1/2012	
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	Bats Not Observed This Insp.: Bats Observed: Bat Sounds:		
	Bat Staining:: Birds Not Observed This Insp.: Birds Protected Species:	Bird Notes:	
	Birds Nesting:     Birds Cliff Swallow:     Birds Cliff Swallow::       Birds Other:     Image: State	Bat Notes:	
	American Association of State Highway and Transportation Officials. All rights reserved. BrM Version 0.0.0.8fate56791 RIDOTAssets6.4.1 [Build Date: Monday April 5, 2021]		
	https://aashtoware.org   AASHTO Publications		
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# **Questions?**



