Metadata Review for:

Data inputs, and marginal and conditional probabilities for implementing belief network for Piebald Madtom  
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Review Info:

Metadata file being reviewed: dunn\_etal-ecosphere\_metadata.xml

Reviewer: Corey G Dunn (cdunn@usgs.gov)

Review Date: 10/06/2023

Summary:

<<insert general review comments here>>

FGDC Schema Errors:

No Schema Errors found

Metadata Content:

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Metadata:

Identification Information

Data Quality Information

Entity and Attribute Information

Distribution Information

Metadata Reference Information

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Identification Information:

Identification Information:

Citation:

Citation Information:

Originator: Corey G. Dunn

Publication Date: 20230915

Title:

Data inputs, and marginal and conditional probabilities for implementing belief network for Piebald Madtom

Geospatial Data Presentation Form: tabular digital data

Other Citation Details:

These are tabulate data used to guide R Code that performs the Bayesian belief network for calculating Resiliency and Redundancy within Representative settings for Piebald Madtom in Dunn et al. (in press).

Online Linkage: https://doi.org/10.5066/P9IBB2K5 (check url, possible problem)

Description:

Abstract:

These tabulated data are used to guide program R code that performs the Bayesian belief network for calculating Resiliency and Redundancy within Representative settings for Piebald Madtom in Dunn et al. (in press at Ecosphere). Data sheets include prior (marginal) probabilities for parent nodes, data inputs for parent nodes based on Piebald Madtom collection records, and conditional probabilities for interior child nodes.

Purpose:

All analyses in Dunn et al. (in press at Ecosphere) were originally performed in the propriety software program Netica. However, R code imports an Excel spreadsheet with these individual csv files to perform an identical open-source analysis as in Dunn et al. (in press).

Time Period of Content:

Time Period Information:

Range of Dates/Times:

Beginning Date: 19000101

Ending Date: 20200601

Currentness Reference: ground condition

Status:

Progress: Complete

Maintenance and Update Frequency: None planned

Spatial Domain:

Description of Geographic Extent:

Extend encompasses eastern tributaries of the lower Mississippi River: Yazoo, Bigblack, Obion, Hatchie-Wolf river systems

Bounding Coordinates:

West Bounding Coordinate: -92.0215

East Bounding Coordinate: -86.7480

North Bounding Coordinate: 37.6490

South Bounding Coordinate: 30.8268

Keywords:

Theme:

Theme Keyword Thesaurus: ISO 19115 Topic Category

Theme Keyword: boundaries

Theme:

Theme Keyword Thesaurus: None

Theme Keyword: Bayesian belief network

Theme Keyword: Piebald Madtom

Theme Keyword: Species Status Assessment

Place:

Place Keyword Thesaurus: None

Place Keyword: Bayesian belief network

Place Keyword: Piebald Madtom

Place Keyword: Species Status Assessment

Taxonomy Information:

Keywords/Taxon:

Taxonomic Keyword Thesaurus: None

Taxonomic Keywords: Noturus gladiator

Taxonomic Classification:

Taxon Rank Name: Kingdom

Taxon Rank Value: Animalia

Taxonomic Classification:

Taxon Rank Name: Subkingdom

Taxon Rank Value: Bilateria

Taxonomic Classification:

Taxon Rank Name: Infrakingdom

Taxon Rank Value: Deuterostomia

Taxonomic Classification:

Taxon Rank Name: Phylum

Taxon Rank Value: Chordata

Taxonomic Classification:

Taxon Rank Name: Subphylum

Taxon Rank Value: Vertebrata

Taxonomic Classification:

Taxon Rank Name: Infraphylum

Taxon Rank Value: Gnathostomata

Taxonomic Classification:

Taxon Rank Name: Superclass

Taxon Rank Value: Actinopterygii

Taxonomic Classification:

Taxon Rank Name: Class

Taxon Rank Value: Teleostei

Taxonomic Classification:

Taxon Rank Name: Superorder

Taxon Rank Value: Ostariophysi

Taxonomic Classification:

Taxon Rank Name: Order

Taxon Rank Value: Siluriformes

Taxonomic Classification:

Taxon Rank Name: Family

Taxon Rank Value: Ictaluridae

Taxonomic Classification:

Taxon Rank Name: Genus

Taxon Rank Value: Noturus

Taxonomic Classification:

Taxon Rank Name: Species

Taxon Rank Value: Noturus gladiator

Applicable Common Name: TSN: 681493

Access Constraints: None. Please see 'Distribution Info' for details.

Use Constraints:

None. Users are advised to read the dataset's metadata thoroughly to understand appropriate use and data limitations.

Point of Contact:

Contact Information:

Contact Person Primary:

Contact Person: Corey G Dunn

Contact Organization: U.S. Geological Survey, ECOSYSTEMS

Contact Position: Unit Leader, Research Fisheries Biologist

Contact Address:

Address Type: mailing address

Address: David Clark Labs, NC State Univ

City: Raleigh

State or Province: NC

Postal Code: 27695-7617

Country: US

Contact Voice Telephone: 919-513-2696

Contact Electronic Mail Address: cdunn@usgs.gov

Data Set Credit:

Much of underlying distributional data were provided by Matt Wagner (U.S. Fish and Wildlife Service) and Dave Schumann (University of Madison - La Crosse).

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Data Quality Information:

Data Quality Information:

Attribute Accuracy:

Attribute Accuracy Report:

These are summarized data. Accuracy of summarized data depends on accuracy of underlying raw data. We performed numerous quality control measures on the raw data, but raw data are based on non-standardized sampling, which can generate biases. Moreover, non-standardized collection data is vulnerable to incompleteness. Additional field sampling could update raw data, thereby potentially influencing summarized data

Logical Consistency Report:

The following quality control measures were performed on underlying raw data  
- Obtained data from reputable sources  
- Collection data were thoroughly reviewed and screened by Matt Wagner (MDWFP, USFWS) and Dave Schumann (MS State, UW La Crosse).  
- Provided GPS locations were cross referenced with field data notes  
- Duplicate records were removed

Completeness Report:

These are all model inputs needed to run the analyses in R presented in Dunn et al. in press. Ecosphere. Model inputs are mainly summarized occurrence data, but also include information on species traits and abundance.

Lineage:

Source Information:

Source Citation:

Citation Information:

Originator: Mississippi Department of Wildlife, Fisheries, and Parks

Publication Date: 20200601

Title:

Piebald Madtom occurrence and abundance records from fish database maintained by Mississippi Department of Wildlife, Fisheries, and Parks

Geospatial Data Presentation Form: tabular digital data

Type of Source Media: Digital and/or Hardcopy

Source Time Period of Content:

Time Period Information:

Range of Dates/Times:

Beginning Date: 19000101

Ending Date: 20200101

Source Currentness Reference: publication date

Source Citation Abbreviation: Piebald Madtom occurrence and abundance records

Source Contribution: Raw occurrence and abundance data for Piebald Madtom

Source Information:

Source Citation:

Citation Information:

Originator: FishNet2

Publication Date: 20200601

Title: Piebald Madtom occurrence and abundance data from museums

Geospatial Data Presentation Form: tabular digital data

Type of Source Media: Digital and/or Hardcopy

Source Time Period of Content:

Time Period Information:

Range of Dates/Times:

Beginning Date: 1900

Ending Date: 2020

Source Currentness Reference: publication date

Source Citation Abbreviation: Piebald Madtom occurrence and abundance data -- FishNet2

Source Contribution: Raw occurrence and abundance records for Piebald Madtom

Process Step:

Process Description:

Additional information is provided in Dunn et al. in press in the journal Ecosphere  
  
Raw distributional and abundance data for Piebald Madtom (Noturus gladiator) were compiled and curated by Matt Wagner (USFWS) and David Schumann (U. Wisconsin La Crosse) from the Mississippi Department of Wildlife, Fisheries, and Parks' database and museum databases.

Process Date: 20200601

Process Step:

Process Description:

Corey Dunn associated raw occurrence records with points along the National Hydrography dataset. Occurrences were snapped to >1st order stream and reviewed for accurate spatial snapping based on context clues (stream name, field notes) provided in raw data.

Process Date: 20200601

Process Step:

Process Description:

Corey Dunn aggregated sampling events to unique stream segment IDs within that National Hydrography Dataset. This step made the spatial grain of an occurrence a NHD stream segment.

Process Date: 20200601

Process Step:

Process Description:

Corey Dunn summarized segment occurrence and abundance data in accordance with methods outlined in Dunn et al. in press at Ecosphere.

Process Date: 20200601

Process Step:

Process Description:

Corey Dunn used summarized data to create prior and information csv files. Additional csv files are conditional probability tables, which were constructed using methods outlined in Dunn et al. in press at Ecosphere.

Process Date: 20231006

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Entity and Attribute Information:

Entity and Attribute Information:

Detailed Description:

Entity Type:

Entity Type Label: dunn\_etal\_cpt\_ES\_extirpation\_risk.csv

Entity Type Definition:

Comma Separated Value (CSV) file containing data. This sheet is the conditional probability table for the child node "Extirpation Risk."

Entity Type Definition Source: Producer Defined

Attribute:

Attribute Label: Redundancy

Attribute Definition: Potential states of parent node, Redundancy

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Adequate

Enumerated Domain Value Definition: Whether the state of parent node Redundancy is 'Adequate'

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Inadequate

Enumerated Domain Value Definition: Whether the state of parent node Redundancy is 'Inadequate'

Enumerated Domain Value Definition Source: Producer defined

Attribute:

Attribute Label: Resiliency

Attribute Definition: Potential states of parent node, Resiliency

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Secure

Enumerated Domain Value Definition: Whether state of parent node Resiliency is in state 'Secure'

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: At\_Risk

Enumerated Domain Value Definition: Whether state of parent node Resiliency is in state 'At risk'

Enumerated Domain Value Definition Source: Producer defined

Attribute:

Attribute Label: Vulnerability

Attribute Definition: Potential states of parent node, Vulnerability

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Vulnerable

Enumerated Domain Value Definition: Whether state of parent node Vulnerability is 'Vulnerable'

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Resistant

Enumerated Domain Value Definition: Whether state of parent node Vulnerability is 'Resistant'

Enumerated Domain Value Definition Source: Producer defined

Attribute:

Attribute Label: Secure

Attribute Definition:

Probability of being in state 'Secure' within child node Extirpation Risk

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Range Domain:

Range Domain Minimum: 0.0

Range Domain Maximum: 1.0

Attribute Units of Measure: probability

Attribute Measurement Resolution: 0.01

Attribute:

Attribute Label: At\_Risk

Attribute Definition:

Conditional probability that state is Probability of being in state 'At risk' within child node Extirpation Risk

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Range Domain:

Range Domain Minimum: 0.0

Range Domain Maximum: 1.0

Attribute Units of Measure: probability

Attribute Measurement Resolution: 0.01

Detailed Description:

Entity Type:

Entity Type Label: dunn\_etal\_cpt\_ES\_redundancy.csv

Entity Type Definition:

Comma Separated Value (CSV) file containing data. This sheet is the conditional probability table for the child node "Redundancy".

Entity Type Definition Source: Producer Defined

Attribute:

Attribute Label: Proportion Extant (count)

Attribute Definition: Potential states of parent node, 'Proportion Extant'

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: << empty cell >>

Enumerated Domain Value Definition: No Data

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Low

Enumerated Domain Value Definition: Whether the state of parent node Proportion Extant is 'Low'

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Moderate

Enumerated Domain Value Definition: Whether the state of parent node Proportion Extant is 'Moderate'

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: High

Enumerated Domain Value Definition: Whether the state of parent node Proportion Extant is 'High'

Enumerated Domain Value Definition Source: Producer defined

Attribute:

Attribute Label: Extant Populations

Attribute Definition: Potential states of parent node, 'Extant Populations'

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: << empty cell >>

Enumerated Domain Value Definition: No Data

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Few

Enumerated Domain Value Definition: Whether the state of parent node Extant Populations is 'Few'

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Moderate

Enumerated Domain Value Definition: Whether the state of parent node Extant Populations is 'Moderate'

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Many

Enumerated Domain Value Definition: Whether the state of parent node Extant Populations is 'Many'

Enumerated Domain Value Definition Source: Producer defined

Attribute:

Attribute Label: PopulationConnectivity

Attribute Definition: Potential states of parent node, 'Population Connectivity'

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: << empty cell >>

Enumerated Domain Value Definition: No Data

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Adequate

Enumerated Domain Value Definition: Whether the state of parent node Population Connectivity is 'Adequate'

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Inadequate

Enumerated Domain Value Definition:

Whether the state of parent node Population Connectivity is 'Inadequate'

Enumerated Domain Value Definition Source: Producer defined

Attribute:

Attribute Label: Adequate

Attribute Definition: Probability of being in state 'Adequate' within child node Redundancy

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: << empty cell >>

Enumerated Domain Value Definition: No Data

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Range Domain:

Range Domain Minimum: 0.0

Range Domain Maximum: 1.0

Attribute Units of Measure: probability

Attribute Measurement Resolution: 0.01

Attribute:

Attribute Label: Inadequate

Attribute Definition: Probability of being in state 'Inadequate' within child node

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: << empty cell >>

Enumerated Domain Value Definition: No Data

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Range Domain:

Range Domain Minimum: 0.0

Range Domain Maximum: 1.0

Attribute Units of Measure: probability

Attribute Measurement Resolution: 0.01

Detailed Description:

Entity Type:

Entity Type Label: dunn\_etal\_cpt\_local\_distribution.csv

Entity Type Definition:

Comma Separated Value (CSV) file containing data. This sheet is the conditional probability table for the child node "Local Distribution".

Entity Type Definition Source: Producer Defined

Attribute:

Attribute Label: Occupied Stream Length (km)

Attribute Definition: Potential states of parent node, 'Occupied Stream Length'

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Restricted

Enumerated Domain Value Definition:

Whether the state of parent node Occupied Stream Length is 'Restricted'

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Moderate

Enumerated Domain Value Definition: Whether the state of parent node Occupied Stream Length is 'Moderate'

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Widespread

Enumerated Domain Value Definition:

Whether the state of parent node Occupied Stream Length is 'Widespread'

Enumerated Domain Value Definition Source: Producer defined

Attribute:

Attribute Label: Occupied Segments

Attribute Definition: Potential states of parent node, 'Occupied Segments'

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: One

Enumerated Domain Value Definition: Whether the state of parent node Occupied Segments is 'One'

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Rare

Enumerated Domain Value Definition: Whether the state of parent node Occupied Segments is 'Rare'

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Many

Enumerated Domain Value Definition: Whether the state of parent node Occupied Segments is 'Many'

Enumerated Domain Value Definition Source: Producer defined

Attribute:

Attribute Label: Network Complexity

Attribute Definition: Potential states of parent node, 'Network Complexity'

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Mainstem

Enumerated Domain Value Definition: Whether the state of parent node Network Complexity is 'Mainstem'

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Single Tributary

Enumerated Domain Value Definition:

Whether the state of parent node Network Complexity is 'Single Tributary'

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Multiple Tributaries

Enumerated Domain Value Definition:

Whether the state of parent node Network Complexity is 'Multiple Tributaries'

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Complex

Enumerated Domain Value Definition: Whether the state of parent node Network Complexity is 'Complex'

Enumerated Domain Value Definition Source: Producer defined

Attribute:

Attribute Label: Adequate

Attribute Definition:

Probability of being in state 'Adequate' within child node Local Distribution

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Range Domain:

Range Domain Minimum: 0.0

Range Domain Maximum: 1.0

Attribute Units of Measure: probability

Attribute Measurement Resolution: 0.01

Attribute:

Attribute Label: Inadequate

Attribute Definition:

Probability of being in state 'Inadequate' within child node Local Distribution

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Range Domain:

Range Domain Minimum: 0.0

Range Domain Maximum: 1.0

Attribute Units of Measure: probability

Attribute Measurement Resolution: 0.01

Detailed Description:

Entity Type:

Entity Type Label: dunn\_etal\_cpt\_other\_threats.csv

Entity Type Definition:

Comma Separated Value (CSV) file containing data. This sheet is the conditional probability table for the child node "Other Threats".

Entity Type Definition Source: Producer Defined

Attribute:

Attribute Label: Nonnative Species (count)

Attribute Definition: Potential states of parent node, 'Nonnative Species'

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Absent

Enumerated Domain Value Definition: Whether the state of parent node Nonnative Species is 'Absent'

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Few

Enumerated Domain Value Definition: Whether the state of parent node Nonnative Species is 'Few'

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Many

Enumerated Domain Value Definition: Whether the state of parent node Nonnative Species is 'Many'

Enumerated Domain Value Definition Source: Producer defined

Attribute:

Attribute Label: Hybridization

Attribute Definition: Potential states of parent node, 'Hybridization'

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Yes

Enumerated Domain Value Definition: Whether the state of parent node Hybridization is 'Yes'

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: No

Enumerated Domain Value Definition: Whether the state of parent node Hybridization is 'No'

Enumerated Domain Value Definition Source: Producer defined

Attribute:

Attribute Label: Low risk

Attribute Definition:

Probability of being in state 'Low risk' within child node Other Threats

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Range Domain:

Range Domain Minimum: 0.0

Range Domain Maximum: 1.0

Attribute Units of Measure: probability

Attribute Measurement Resolution: 0.01

Attribute:

Attribute Label: High risk

Attribute Definition:

Probability of being in state 'High Risk' within child node Other Threats

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Range Domain:

Range Domain Minimum: 0.0

Range Domain Maximum: 1.0

Attribute Units of Measure: probability

Attribute Measurement Resolution: 0.01

Detailed Description:

Entity Type:

Entity Type Label: dunn\_etal\_cpt\_pop\_connectivity.csv

Entity Type Definition:

Comma Separated Value (CSV) file containing data. This sheet is the conditional probability table for the child node "Population Connectivity".

Entity Type Definition Source: Producer Defined

Attribute:

Attribute Label: Network Connectivity (km)

Attribute Definition: Potential states of parent node, 'Network Connectivity'

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Fragmented

Enumerated Domain Value Definition: Whether the state of parent node Network Connectivity is 'Fragmented'

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Moderate

Enumerated Domain Value Definition: Whether the state of parent node Network Connectivity is 'Moderate'

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: High

Enumerated Domain Value Definition: Whether the state of parent node Network Connectivity is 'High'

Enumerated Domain Value Definition Source: Producer defined

Attribute:

Attribute Label: Population Isolation (km)

Attribute Definition: Potential states of parent node, 'Population Isolation'

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Near

Enumerated Domain Value Definition: Whether the state of parent node Population Isolation is 'Near'

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Moderate

Enumerated Domain Value Definition: Whether the state of parent node Population Isolation is 'Moderate'

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Far

Enumerated Domain Value Definition: Whether the state of parent node Population Isolation is 'Far'

Enumerated Domain Value Definition Source: Producer defined

Attribute:

Attribute Label: Ranging Movements (km)

Attribute Definition: Potential states of parent node, 'Ranging Movements'

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Short

Enumerated Domain Value Definition: Whether the state of parent node Ranging Movements is 'Short'

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Moderate

Enumerated Domain Value Definition: Whether the state of parent node Ranging Movements is 'Moderate'

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Long

Enumerated Domain Value Definition: Whether the state of parent node Ranging Movements is 'Long'

Enumerated Domain Value Definition Source: Producer defined

Attribute:

Attribute Label: Adequate

Attribute Definition:

Probability of being in state 'Adequate' within child node Population Connectivity

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Range Domain:

Range Domain Minimum: 0.0

Range Domain Maximum: 1.0

Attribute Units of Measure: probability

Attribute Measurement Resolution: 0.01

Attribute:

Attribute Label: Inadequate

Attribute Definition:

Probability of being in state 'Inadequate' within child node Population Connectivity

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Range Domain:

Range Domain Minimum: 0.0

Range Domain Maximum: 1.0

Attribute Units of Measure: probability

Attribute Measurement Resolution: 0.01

Detailed Description:

Entity Type:

Entity Type Label: dunn\_etal\_cpt\_pop\_resiliency.csv

Entity Type Definition:

Comma Separated Value (CSV) file containing data. This sheet is the conditional probability table for the child node "Population Resiliency".

Entity Type Definition Source: Producer Defined

Attribute:

Attribute Label: Local Distribution

Attribute Definition: Potential states of parent node, 'Local Distribution'

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Adequate

Enumerated Domain Value Definition: Whether the state of parent node Local Distribution is 'Adequate'

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Inadequate

Enumerated Domain Value Definition: Whether the state of parent node Local Distribution is 'Inadequate'

Enumerated Domain Value Definition Source: Producer defined

Attribute:

Attribute Label: Population Strength

Attribute Definition: Potential states of parent node, 'Population Strength'

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Adequate

Enumerated Domain Value Definition: Whether the state of parent node Population Strength is 'Adequate'

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Inadequate

Enumerated Domain Value Definition: Whether the state of parent node Population Strength is 'Inadequate'

Enumerated Domain Value Definition Source: Producer defined

Attribute:

Attribute Label: Other Threats

Attribute Definition: Potential states of parent node, 'Other Threats'

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Low risk

Enumerated Domain Value Definition: Whether the state of parent node Other Threats is 'Low Risk'

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: High risk

Enumerated Domain Value Definition: Whether the state of parent node Other Threats is 'Low Risk'

Enumerated Domain Value Definition Source: Producer defined

Attribute:

Attribute Label: Secure

Attribute Definition:

Probability of being in state 'Secure' within child node Population Resiliency

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Range Domain:

Range Domain Minimum: 0.0

Range Domain Maximum: 1.0

Attribute Units of Measure: probability

Attribute Measurement Resolution: 0.01

Attribute:

Attribute Label: At risk

Attribute Definition:

Probability of being in state 'At Risk' within child node Population Resiliency

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Range Domain:

Range Domain Minimum: 0.0

Range Domain Maximum: 1.0

Attribute Units of Measure: probability

Attribute Measurement Resolution: 0.01

Detailed Description:

Entity Type:

Entity Type Label: dunn\_etal\_cpt\_population\_strength.csv

Entity Type Definition:

Comma Separated Value (CSV) file containing data. This sheet is the conditional probability table for the child node "Population Strength".

Entity Type Definition Source: Producer Defined

Attribute:

Attribute Label: Naive Occupancy (Current)

Attribute Definition: Potential states of parent node, 'Naive Occupancy'

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Potentially Extirpated

Enumerated Domain Value Definition:

Whether the state of parent node Naive Occupancy is 'Potentially Extirpated'

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Rare

Enumerated Domain Value Definition: Whether the state of parent node Naive Occupancy is 'Rare'

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Uncommon

Enumerated Domain Value Definition: Whether the state of parent node Naive Occupancy is 'Uncommon'

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Common

Enumerated Domain Value Definition: Whether the state of parent node Naive Occupancy is 'Common'

Enumerated Domain Value Definition Source: Producer defined

Attribute:

Attribute Label: Qualitative Abundance (count)

Attribute Definition: Potential states of parent node, 'Qualitative Abundance'

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Rare

Enumerated Domain Value Definition: Whether the state of parent node Qualitative Abundance is 'Rare'

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Uncommon

Enumerated Domain Value Definition: Whether the state of parent node Qualitative Abundance is 'Uncommon'

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Abundant

Enumerated Domain Value Definition: Whether the state of parent node Qualitative Abundance is 'Abundant'

Enumerated Domain Value Definition Source: Producer defined

Attribute:

Attribute Label: Years Since Last Encounter

Attribute Definition: Potential states of parent node, 'Years Since Last Encounter'

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Recent

Enumerated Domain Value Definition: Whether the state of parent node Time Since Last Encounter is 'Recent'

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Moderate

Enumerated Domain Value Definition:

Whether the state of parent node Time Since Last Encounter is 'Moderate'

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Historical

Enumerated Domain Value Definition:

Whether the state of parent node Time Since Last Encounter is 'Historical'

Enumerated Domain Value Definition Source: Producer defined

Attribute:

Attribute Label: Naive Occupancy Trend (%)

Attribute Definition: Potential states of parent node, 'Naive Occupancy Trend'

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Relatively Stable

Enumerated Domain Value Definition:

Whether the state of parent node Naive Occupancy Trend is 'Relatively Stable'

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Moderate Decline

Enumerated Domain Value Definition:

Whether the state of parent node Naive Occupancy Trend is 'Moderate Decline'

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Strong Decline

Enumerated Domain Value Definition:

Whether the state of parent node Naive Occupancy Trend is 'Strong Decline'

Enumerated Domain Value Definition Source: Producer defined

Attribute:

Attribute Label: Adequate

Attribute Definition:

Probability of being in state 'Adequate' within child node Population Structure

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Range Domain:

Range Domain Minimum: 0.0

Range Domain Maximum: 1.0

Attribute Units of Measure: probability

Attribute Measurement Resolution: 0.01

Attribute:

Attribute Label: Inadequate

Attribute Definition:

Probability of being in state 'Inadequate' within child node Population Structure

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Range Domain:

Range Domain Minimum: 0.0

Range Domain Maximum: 1.0

Attribute Units of Measure: probability

Attribute Measurement Resolution: 0.01

Detailed Description:

Entity Type:

Entity Type Label: dunn\_etal\_cpt\_specialization.csv

Entity Type Definition:

Comma Separated Value (CSV) file containing data. This sheet is the conditional probability table for the child node "Specialization".

Entity Type Definition Source: Producer Defined

Attribute:

Attribute Label: Adult Feeding Guild

Attribute Definition: Potential states of parent node, 'Adult Feeding Guild'

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Piscivore

Enumerated Domain Value Definition: Whether the state of parent node Adult Feeding Guild is 'Piscivore'

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Invertivore

Enumerated Domain Value Definition: Whether the state of parent node Adult Feeding Guild is 'Invertivore'

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Other

Enumerated Domain Value Definition: Whether the state of parent node Adult Feeding Guild is 'Other'

Enumerated Domain Value Definition Source: Producer defined

Attribute:

Attribute Label: Benthic Dependency

Attribute Definition: Potential states of parent node, 'Benthic Dependency'

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Non Benthic

Enumerated Domain Value Definition: Whether the state of parent node Benthic Dependency is 'Non Benthic'

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Partially Benthic

Enumerated Domain Value Definition:

Whether the state of parent node Benthic Dependency is 'Partially Benthic'

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Benthic Syndrome

Enumerated Domain Value Definition:

Whether the state of parent node Benthic Dependency is 'Benthic Syndrome'

Enumerated Domain Value Definition Source: Producer defined

Attribute:

Attribute Label: Drift Dependency

Attribute Definition: Potential states of parent node, 'Drift Dependency'

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Drift Dependent

Enumerated Domain Value Definition: Whether the state of parent node Drift Dependency is 'Drift Dependent'

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Other

Enumerated Domain Value Definition: Whether the state of parent node Drift Dependency is 'Other'

Enumerated Domain Value Definition Source: Producer defined

Attribute:

Attribute Label: Lotic Dependency

Attribute Definition: Potential states of parent node, 'Lotic Dependency'

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Lotic

Enumerated Domain Value Definition: Whether the state of parent node Lotic Dependency is 'Lotic'

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Lentic

Enumerated Domain Value Definition: Whether the state of parent node Lotic Dependency is 'Lentic'

Enumerated Domain Value Definition Source: Producer defined

Attribute:

Attribute Label: Specialist

Attribute Definition:

Probability of being in state 'Specialist' within child node Specialization

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Range Domain:

Range Domain Minimum: 0.1

Range Domain Maximum: 0.95

Attribute Units of Measure: probability

Attribute Measurement Resolution: 0.01

Attribute:

Attribute Label: Generalist

Attribute Definition:

Probability of being in state 'Generalist' within child node Specialization

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Range Domain:

Range Domain Minimum: 0.05

Range Domain Maximum: 0.9

Attribute Units of Measure: probability

Attribute Measurement Resolution: 0.01

Detailed Description:

Entity Type:

Entity Type Label: dunn\_etal\_observed\_redundancy.csv

Entity Type Definition:

Comma Separated Value (CSV) file containing data. This sheet denotes observed states for Piebald Madtom by ecological setting of the child node 'Redundancy'

Entity Type Definition Source: Producer Defined

Attribute:

Attribute Label: node

Attribute Definition: Name of node contributing to Redundancy

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Population Isolation (km)

Enumerated Domain Value Definition:

Indicates row with observed states corresponding to Population Isolation node

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Ranging Movements (km)

Enumerated Domain Value Definition:

Indicates row with observed states corresponding to Ranging Movements node

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Network Connectivity (km)

Enumerated Domain Value Definition:

Indicates row with observed states corresponding to Network Connectivity node

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Proportion Extant (count)

Enumerated Domain Value Definition:

Indicates row with observed states corresponding to Proportion Extant node

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Extant Populations

Enumerated Domain Value Definition:

Indicates row with observed states corresponding to Extant Populations node

Enumerated Domain Value Definition Source: Producer defined

Attribute:

Attribute Label: state

Attribute Definition: Name of state within corresponding node

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Near

Enumerated Domain Value Definition:

Indicates whether observed state is 'Near' within node Population Isolation

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Moderate

Enumerated Domain Value Definition:

Indicates whether observed state is 'Moderate' within node Population Isolation

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Far

Enumerated Domain Value Definition:

Indicates whether observed state is 'Far' within node Population Isolation

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Short

Enumerated Domain Value Definition:

Indicates whether observed state is 'Short' within node Ranging Movements

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Long

Enumerated Domain Value Definition:

Indicates whether observed state is 'Long' within node Ranging Movements

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Fragmented

Enumerated Domain Value Definition:

Indicates whether observed state is 'Fragmented' within node Network Connectivity

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: High

Enumerated Domain Value Definition:

Indicates whether observed state is 'High' within node Network Connectivity

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Low

Enumerated Domain Value Definition:

Indicates whether observed state is 'Low' within node Proportion Extant

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Few

Enumerated Domain Value Definition:

Indicates whether observed state is 'Few' within node Extant Populations

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Many

Enumerated Domain Value Definition:

Indicates whether observed state is 'Many' within node Extant Populations

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Moderate

Enumerated Domain Value Definition:

Indicates whether observed state is 'Moderate' within node Ranging Movements

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Moderate

Enumerated Domain Value Definition:

Indicates whether observed state is 'Moderate' within node Extant Populations

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: High

Enumerated Domain Value Definition:

Indicates whether observed state is 'High' within node Proportion Extant

Enumerated Domain Value Definition Source: Producer defined

Attribute:

Attribute Label: Obion

Attribute Definition: Observed (= 1) states within the Obion Ecological Setting

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Range Domain:

Range Domain Minimum: 0

Range Domain Maximum: 1

Attribute:

Attribute Label: Hatchie\_Wolf

Attribute Definition: Observed (= 1) states within the Hatchie-Wolf Ecological Setting

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Range Domain:

Range Domain Minimum: 0

Range Domain Maximum: 1

Attribute:

Attribute Label: Yazoo

Attribute Definition: Observed (= 1) states within the Yazoo Ecological Setting

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Range Domain:

Range Domain Minimum: 0

Range Domain Maximum: 1

Attribute:

Attribute Label: BigBlack

Attribute Definition: Observed (= 1) states within the Big Black Ecological Setting

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Range Domain:

Range Domain Minimum: 0

Range Domain Maximum: 1

Detailed Description:

Entity Type:

Entity Type Label: dunn\_etal\_observed\_resiliency.csv

Entity Type Definition:

Comma Separated Value (CSV) file containing data. This sheet denotes observed states for Piebald Madtom by management unit (HUC10) of the child node 'Resiliency'

Entity Type Definition Source: Producer Defined

Attribute:

Attribute Label: node

Attribute Definition: Name of node contributing to Resiliency

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: << empty cell >>

Enumerated Domain Value Definition: No Data

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Occupied Segments

Enumerated Domain Value Definition:

Indicates row with observed states corresponding to Occupied Segments node

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Naive Occupancy (Current)

Enumerated Domain Value Definition:

Indicates row with observed states corresponding to Naive Occupancy node

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Occupied Stream Length (km)

Enumerated Domain Value Definition:

Indicates row with observed states corresponding to Occupied Stream Length node

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Naive Occupancy Trend (%)

Enumerated Domain Value Definition:

Indicates row with observed states corresponding to Naive Occupancy Trend node

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Qualitative Abundance (count)

Enumerated Domain Value Definition:

Indicates row with observed states corresponding to Qualitative Abundance node

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Network Complexity

Enumerated Domain Value Definition:

Indicates row with observed states corresponding to Network Complexity node

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Time Since Last Encounter (years)

Enumerated Domain Value Definition:

Indicates row with observed states corresponding to Years Since Last Encounter node

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Hybridization

Enumerated Domain Value Definition: Indicates row with observed states corresponding to Hybridization node

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Nonnative Species (count)

Enumerated Domain Value Definition:

Indicates row with observed states corresponding to Nonnative Species node

Enumerated Domain Value Definition Source: Producer defined

Attribute:

Attribute Label: state

Attribute Definition: Name of state within corresponding node

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: One

Enumerated Domain Value Definition:

Indicates whether observed state is 'One' within node Occupied Segments

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Rare

Enumerated Domain Value Definition:

Indicates whether observed state is 'Rare' within node Occupied Segments

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Many

Enumerated Domain Value Definition:

Indicates whether observed state is 'Many' within node Occupied Segments

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Potentially Extirpated

Enumerated Domain Value Definition:

Indicates whether observed state is 'Potentially Extirpated' within node Naive Occupancy

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Uncommon

Enumerated Domain Value Definition:

Indicates whether observed state is 'Uncommon' within node Naive Occupancy

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Common

Enumerated Domain Value Definition:

Indicates whether observed state is 'Common' within node Naive Occupancy

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Restricted

Enumerated Domain Value Definition:

Indicates whether observed state is 'Restricted' within node Occupied Stream Length

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Moderate

Enumerated Domain Value Definition:

Indicates whether observed state is 'Moderate' within node Occupied Stream Length

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Widespread

Enumerated Domain Value Definition:

Indicates whether observed state is 'Widespread' within node Occupied Stream Length

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Relatively Stable

Enumerated Domain Value Definition:

Indicates whether observed state is 'Relatively Stable' within node Naive Occupancy Trend

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Moderate Decline

Enumerated Domain Value Definition:

Indicates whether observed state is 'Moderate Decline' within node Naive Occupancy Trend

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Strong Decline

Enumerated Domain Value Definition:

Indicates whether observed state is 'Strong Decline' within node Naive Occupancy Trend

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Abundant

Enumerated Domain Value Definition:

Indicates whether observed state is 'Abundant' within node Qualitative Abundance

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Mainstem

Enumerated Domain Value Definition:

Indicates whether observed state is 'Mainstem' within node Network Complexity

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Single Tributary

Enumerated Domain Value Definition:

Indicates whether observed state is 'Single Tributary' within node Network Complexity

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Multiple Tributaries

Enumerated Domain Value Definition:

Indicates whether observed state is 'Multiple Tributaries' within node Network Complexity

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Complex

Enumerated Domain Value Definition:

Indicates whether observed state is 'Complex' within node Network Complexity

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Recent

Enumerated Domain Value Definition:

Indicates whether observed state is 'Recent' within node Time Since Last Encounter

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Historical

Enumerated Domain Value Definition:

Indicates whether observed state is 'Historical' within node Time Since Last Encounter

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Yes

Enumerated Domain Value Definition: Indicates whether observed state is 'Yes' within node Hybridization

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: No

Enumerated Domain Value Definition: Indicates whether observed state is 'No' within node Hybridization

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Absent

Enumerated Domain Value Definition:

Indicates whether observed state is 'Absent' within node Nonnative Species

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Few

Enumerated Domain Value Definition:

Indicates whether observed state is 'Few' within node Nonnative Species

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Rare

Enumerated Domain Value Definition: Indicates whether observed state is 'Rare' within node Naive Occupancy

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Uncommon

Enumerated Domain Value Definition:

Indicates whether observed state is 'Uncommon' within node Qualitative Abundance

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Moderate

Enumerated Domain Value Definition:

Indicates whether observed state is 'Moderate' within node Years Since Last Encounter

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Many

Enumerated Domain Value Definition:

Indicates whether observed state is 'Many' within node Nonnative Species

Enumerated Domain Value Definition Source: Producer defined

Attribute:

Attribute Label: HUC\_0801020201

Attribute Definition: Observed (= 1) states within the 10-digit Hydrologic Unit 0801020201

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: << empty cell >>

Enumerated Domain Value Definition: No Data

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Range Domain:

Range Domain Minimum: 0

Range Domain Maximum: 1

Attribute:

Attribute Label: HUC\_0801020202

Attribute Definition: Observed (= 1) states within the 10-digit Hydrologic Unit 0801020202

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: << empty cell >>

Enumerated Domain Value Definition: No Data

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Range Domain:

Range Domain Minimum: 0

Range Domain Maximum: 1

Attribute:

Attribute Label: HUC\_0801020304

Attribute Definition: Observed (= 1) states within the 10-digit Hydrologic Unit 0801020304

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: << empty cell >>

Enumerated Domain Value Definition: No Data

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Range Domain:

Range Domain Minimum: 0

Range Domain Maximum: 1

Attribute:

Attribute Label: HUC\_0801020306

Attribute Definition: Observed (= 1) states within the 10-digit Hydrologic Unit 0801020306

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: << empty cell >>

Enumerated Domain Value Definition: No Data

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Range Domain:

Range Domain Minimum: 0

Range Domain Maximum: 1

Attribute:

Attribute Label: HUC\_0801020701

Attribute Definition: Observed (= 1) states within the 10-digit Hydrologic Unit 0801020701

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: << empty cell >>

Enumerated Domain Value Definition: No Data

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Range Domain:

Range Domain Minimum: 0

Range Domain Maximum: 1

Attribute:

Attribute Label: HUC\_0801020702

Attribute Definition: Observed (= 1) states within the 10-digit Hydrologic Unit 0801020702

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: << empty cell >>

Enumerated Domain Value Definition: No Data

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Range Domain:

Range Domain Minimum: 0

Range Domain Maximum: 1

Attribute:

Attribute Label: HUC\_0801020705

Attribute Definition: Observed (= 1) states within the 10-digit Hydrologic Unit 0801020705

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: << empty cell >>

Enumerated Domain Value Definition: No Data

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Range Domain:

Range Domain Minimum: 0

Range Domain Maximum: 1

Attribute:

Attribute Label: HUC\_0801020708

Attribute Definition: Observed (= 1) states within the 10-digit Hydrologic Unit 0801020708

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: << empty cell >>

Enumerated Domain Value Definition: No Data

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Range Domain:

Range Domain Minimum: 0

Range Domain Maximum: 1

Attribute:

Attribute Label: HUC\_0801020801

Attribute Definition: Observed (= 1) states within the 10-digit Hydrologic Unit 0801020801

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: << empty cell >>

Enumerated Domain Value Definition: No Data

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Range Domain:

Range Domain Minimum: 0

Range Domain Maximum: 1

Attribute:

Attribute Label: HUC\_0801020802

Attribute Definition: Observed (= 1) states within the 10-digit Hydrologic Unit 0801020802

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: << empty cell >>

Enumerated Domain Value Definition: No Data

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Range Domain:

Range Domain Minimum: 0

Range Domain Maximum: 1

Attribute:

Attribute Label: HUC\_0801020805

Attribute Definition: Observed (= 1) states within the 10-digit Hydrologic Unit 0801020805

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: << empty cell >>

Enumerated Domain Value Definition: No Data

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Range Domain:

Range Domain Minimum: 0

Range Domain Maximum: 1

Attribute:

Attribute Label: HUC\_0801020901

Attribute Definition: Observed (= 1) states within the 10-digit Hydrologic Unit 0801020901

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: << empty cell >>

Enumerated Domain Value Definition: No Data

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Range Domain:

Range Domain Minimum: 0

Range Domain Maximum: 1

Attribute:

Attribute Label: HUC\_0801021002

Attribute Definition: Observed (= 1) states within the 10-digit Hydrologic Unit 0801021002

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: << empty cell >>

Enumerated Domain Value Definition: No Data

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Range Domain:

Range Domain Minimum: 0

Range Domain Maximum: 1

Attribute:

Attribute Label: HUC\_0801021003

Attribute Definition: Observed (= 1) states within the 10-digit Hydrologic Unit 0801021003

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: << empty cell >>

Enumerated Domain Value Definition: No Data

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Range Domain:

Range Domain Minimum: 0

Range Domain Maximum: 1

Attribute:

Attribute Label: HUC\_0803020106

Attribute Definition: Observed (= 1) states within the 10-digit Hydrologic Unit 0803020106

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: << empty cell >>

Enumerated Domain Value Definition: No Data

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Range Domain:

Range Domain Minimum: 0

Range Domain Maximum: 1

Attribute:

Attribute Label: HUC\_0803020401

Attribute Definition: Observed (= 1) states within the 10-digit Hydrologic Unit 0803020401

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: << empty cell >>

Enumerated Domain Value Definition: No Data

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Range Domain:

Range Domain Minimum: 0

Range Domain Maximum: 1

Attribute:

Attribute Label: HUC\_0803020403

Attribute Definition: Observed (= 1) states within the 10-digit Hydrologic Unit 0803020403

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: << empty cell >>

Enumerated Domain Value Definition: No Data

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Range Domain:

Range Domain Minimum: 0

Range Domain Maximum: 1

Attribute:

Attribute Label: HUC\_0806020101

Attribute Definition: Observed (= 1) states within the 10-digit Hydrologic Unit 0806020101

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: << empty cell >>

Enumerated Domain Value Definition: No Data

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Range Domain:

Range Domain Minimum: 0

Range Domain Maximum: 1

Attribute:

Attribute Label: HUC\_0806020104

Attribute Definition: Observed (= 1) states within the 10-digit Hydrologic Unit

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: << empty cell >>

Enumerated Domain Value Definition: No Data

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Range Domain:

Range Domain Minimum: 0

Range Domain Maximum: 1

Attribute:

Attribute Label: HUC\_0806020107

Attribute Definition: Observed (= 1) states within the 10-digit Hydrologic Unit

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: << empty cell >>

Enumerated Domain Value Definition: No Data

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Range Domain:

Range Domain Minimum: 0

Range Domain Maximum: 1

Attribute:

Attribute Label: HUC\_0806020204

Attribute Definition: Observed (= 1) states within the 10-digit Hydrologic Unit

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: << empty cell >>

Enumerated Domain Value Definition: No Data

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Range Domain:

Range Domain Minimum: 0

Range Domain Maximum: 1

Detailed Description:

Entity Type:

Entity Type Label: dunn\_etal\_observed\_vulnerability.csv

Entity Type Definition:

Comma Separated Value (CSV) file containing data. This sheet denotes observed states for Piebald Madtom within the child node 'Vulnerability'

Entity Type Definition Source: Producer Defined

Attribute:

Attribute Label: node

Attribute Definition: Name of node contributing to Vulnerability

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Life History Strategy

Enumerated Domain Value Definition:

Indicates row with observed states corresponding to Life History Strategy node

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Adult Feeding Guild

Enumerated Domain Value Definition:

Indicates row with observed states corresponding to Adult Feeding Guild node

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Maximum Length (mm)

Enumerated Domain Value Definition:

Indicates row with observed states corresponding to Maximum Length node

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Drift Dependency

Enumerated Domain Value Definition:

Indicates row with observed states corresponding to Drift Dependency node

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Benthic Dependency

Enumerated Domain Value Definition:

Indicates row with observed states corresponding to Benthic Dependency node

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Lotic Dependency

Enumerated Domain Value Definition:

Indicates row with observed states corresponding to Lotic Dependency node

Enumerated Domain Value Definition Source: Producer defined

Attribute:

Attribute Label: state

Attribute Definition: Name of state within corresponding node

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Opportunistic

Enumerated Domain Value Definition:

Indicates whether observed state is 'Opportunistic' within the node Life History Strategy

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Periodic

Enumerated Domain Value Definition:

Indicates whether observed state is 'Periodic' within the node Life History Strategy

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Equilibrium

Enumerated Domain Value Definition:

Indicates whether observed state is 'Equilibrum' within the node Life History Strategy

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Piscivore

Enumerated Domain Value Definition:

Indicates whether observed state is 'Piscivore' within the node Adult Feeding Guild

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Invertivore

Enumerated Domain Value Definition:

Indicates whether observed state is 'Invertivore' within the node Adult Feeding Guild

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Other

Enumerated Domain Value Definition:

Indicates whether observed state is 'Other' within the node Adult Feeding Guild

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Small

Enumerated Domain Value Definition:

Indicates whether observed state is 'Small' within the node Maximum Length

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Medium

Enumerated Domain Value Definition:

Indicates whether observed state is 'Medium' within the node Maximum Length

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Large

Enumerated Domain Value Definition:

Indicates whether observed state is 'Large' within the node Maximum Length

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Drift Dependent

Enumerated Domain Value Definition:

Indicates whether observed state is 'Drift Dependent' within the node Drift Dependency

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Non Benthic

Enumerated Domain Value Definition:

Indicates whether observed state is 'Non Benthic' within the node Benthic Dependency

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Partially Benthic

Enumerated Domain Value Definition:

Indicates whether observed state is 'Partially Benthic' within the node Benthic Dependency

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Benthic Syndrome

Enumerated Domain Value Definition:

Indicates whether observed state is 'Benthic Syndrome' within the node Benthic Dependency

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Lotic

Enumerated Domain Value Definition:

Indicates whether observed state is 'Lotic' within the node Lotic Dependency

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Lentic

Enumerated Domain Value Definition:

Indicates whether observed state is 'Lentic' within the node Lotic Dependency

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Other

Enumerated Domain Value Definition:

Indicates whether observed state is 'Other' within the node Drift Dependency

Enumerated Domain Value Definition Source: Producer defined

Attribute:

Attribute Label: N\_gladiator

Attribute Definition: Observed (= 1) states for Piebald Madtom (Noturus gladiator)

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Range Domain:

Range Domain Minimum: 0

Range Domain Maximum: 1

Detailed Description:

Entity Type:

Entity Type Label: dunn\_etal\_parent\_priors.csv

Entity Type Definition:

Comma Separated Value (CSV) file containing data. This sheet denotes default prior probabilities for states within parent nodes of the Bayesian belief network

Entity Type Definition Source: Producer Defined

Attribute:

Attribute Label: state

Attribute Definition: State within Bayesian belief network

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Absent

Enumerated Domain Value Definition: State within node Nonnative Species

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Few

Enumerated Domain Value Definition: State within node Nonnative Species

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Many

Enumerated Domain Value Definition: State within node Nonnative Species

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Yes

Enumerated Domain Value Definition: State within node Hybridization

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: No

Enumerated Domain Value Definition: State within node Hybridization

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Relatively Stable

Enumerated Domain Value Definition: State within node Naive Occupancy Trend

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Moderate Decline

Enumerated Domain Value Definition: State within node Naive Occupancy Trend

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Strong Decline

Enumerated Domain Value Definition: State within node Naive Occupancy Trend

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Potentially Extirpated

Enumerated Domain Value Definition: State within node Naive Occupancy

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Rare

Enumerated Domain Value Definition: State within node Naive Occupancy

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Uncommon

Enumerated Domain Value Definition: State within node Naive Occupancy

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Common

Enumerated Domain Value Definition: State within node Naive Occupancy

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Abundant

Enumerated Domain Value Definition: State within node Qualitative Abundance

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Recent

Enumerated Domain Value Definition: State within node Years Since Last Encounter

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Moderate

Enumerated Domain Value Definition: State within node Years Since Last Encounter

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Historical

Enumerated Domain Value Definition: State within node Years Since Last Encounter

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Restricted

Enumerated Domain Value Definition: State within node Occupied Stream Length

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Widespread

Enumerated Domain Value Definition: State within node Occupied Stream Length

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: One

Enumerated Domain Value Definition: State within node Occupied Segments

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Mainstem

Enumerated Domain Value Definition: State within node Network Complexity

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Single Tributary

Enumerated Domain Value Definition: State within node Network Complexity

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Multiple Tributaries

Enumerated Domain Value Definition: State within node Network Complexity

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Complex

Enumerated Domain Value Definition: State within node Network Complexity

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Near

Enumerated Domain Value Definition: State within node Population Isolation

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Far

Enumerated Domain Value Definition: State within node Population Isolation

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Short

Enumerated Domain Value Definition: State within node Ranging Movements

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Long

Enumerated Domain Value Definition: State within node Ranging Movements

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Fragmented

Enumerated Domain Value Definition: State within node Network Connectivity

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: High

Enumerated Domain Value Definition: State within node Network Connectivity

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Low

Enumerated Domain Value Definition: State within node Proportion Extant

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Small

Enumerated Domain Value Definition: State within node Maximum Length

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Medium

Enumerated Domain Value Definition: State within node Maximum Length

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Large

Enumerated Domain Value Definition: State within node Maximum Length

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Opportunistic

Enumerated Domain Value Definition: State within node Life History Strategy

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Periodic

Enumerated Domain Value Definition: State within node Life History Strategy

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Equilibrium

Enumerated Domain Value Definition: State within node Life History Strategy

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Piscivore

Enumerated Domain Value Definition: State within node Adult Feeding Guild

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Invertivore

Enumerated Domain Value Definition: State within node Adult Feeding Guild

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Other

Enumerated Domain Value Definition: State within node Adult Feeding Guild

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Non Benthic

Enumerated Domain Value Definition: State within node Benthic Dependency

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Partially Benthic

Enumerated Domain Value Definition: State within node Benthic Dependency

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Benthic Syndrome

Enumerated Domain Value Definition: State within node Benthic Dependency

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Drift Dependent

Enumerated Domain Value Definition: State within node Drift Dependency

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Lotic

Enumerated Domain Value Definition: State within node Lotic Dependency

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Lentic

Enumerated Domain Value Definition: State within node Lotic Dependency

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Rare

Enumerated Domain Value Definition: State within node Qualitative Abundance

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Uncommon

Enumerated Domain Value Definition: State within node Qualitative Abundance

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Moderate

Enumerated Domain Value Definition: State within node Occupied Stream Length

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Moderate

Enumerated Domain Value Definition: State within node Population Isolation

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Moderate

Enumerated Domain Value Definition: State within node Ranging Movements

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Moderate

Enumerated Domain Value Definition: State within node Network Connectivity

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Moderate

Enumerated Domain Value Definition: State within node Proportion Extant

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: High

Enumerated Domain Value Definition: State within node Proportion Extant

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Few

Enumerated Domain Value Definition: State within node Extant Populations

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Moderate

Enumerated Domain Value Definition: State within node Extant Populations

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Many

Enumerated Domain Value Definition: State within node Extant Populations

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Other

Enumerated Domain Value Definition: State within node Drift Dependency

Enumerated Domain Value Definition Source: Producer defined

Attribute:

Attribute Label: prob

Attribute Definition: Marginal prior probability of the state.

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Range Domain:

Range Domain Minimum: 0.25

Range Domain Maximum: 0.5

Attribute:

Attribute Label: node

Attribute Definition: Node corresponding to the state

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Unrepresentable Domain: The node containing the state in the corresponding row.

Attribute:

Attribute Label: child\_node

Attribute Definition:

child node in which the is conditionally dependent on the state and parent node

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Other Threats

Enumerated Domain Value Definition: Child node of the parent node Nonnative Species

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Population Structure

Enumerated Domain Value Definition: Child node of the parent node Population Structure

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Local Distribution

Enumerated Domain Value Definition: Child node of the parent node Local Distribution

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Population Connectivity

Enumerated Domain Value Definition: Child node of the parent node Population Connectivity

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Redundancy

Enumerated Domain Value Definition: Child node of the parent node Redundancy

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Life History Strategy

Enumerated Domain Value Definition: Child node of the parent node Life History Strategy

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Resource Use

Enumerated Domain Value Definition: Child node of the parent node Resource Use

Enumerated Domain Value Definition Source: Producer defined

Detailed Description:

Entity Type:

Entity Type Label: dunn\_etal\_cpt\_species\_vulnerability.csv

Entity Type Definition:

Comma Separated Value (CSV) file containing data. This sheet is the conditional probability table for the child node "Species Vulnerability".

Entity Type Definition Source: Producer Defined

Attribute:

Attribute Label: Life History Strategy

Attribute Definition: Potential states of parent node, 'Life History Strategy'

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Opportunistic

Enumerated Domain Value Definition: Whether the state of parent Life History Strategy is "Opportunistic''

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Periodic

Enumerated Domain Value Definition: Whether the state of parent Life History Strategy is "Periodic''

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Equilibrium

Enumerated Domain Value Definition: Whether the state of parent Life History Strategy is "Equilibrium''

Enumerated Domain Value Definition Source: Producer defined

Attribute:

Attribute Label: Specialization

Attribute Definition: Potential states of parent node, 'Specialization'

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Specialist

Enumerated Domain Value Definition: Whether the state of parent Specialization is "Specialist''

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Generalist

Enumerated Domain Value Definition: Whether the state of parent Specialization is "Generalist''

Enumerated Domain Value Definition Source: Producer defined

Attribute:

Attribute Label: Maximum Length

Attribute Definition: Potential states of parent node, 'Maximum Length''

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Small

Enumerated Domain Value Definition: Whether the state of parent Maximum Length is "Small''

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Medium

Enumerated Domain Value Definition: Whether the state of parent Maximum Length is "Medium''

Enumerated Domain Value Definition Source: Producer defined

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Large

Enumerated Domain Value Definition: Whether the state of parent Maximum Length is "Large''

Enumerated Domain Value Definition Source: Producer defined

Attribute:

Attribute Label: Vulnerable

Attribute Definition:

Probability of being in state 'Vulnerable' within child node Vulnerability

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Range Domain:

Range Domain Minimum: 0.15

Range Domain Maximum: 0.95

Attribute Units of Measure: probability

Attribute Measurement Resolution: 0.01

Attribute:

Attribute Label: Resistant

Attribute Definition:

Probability of being in state Resistant' within child node Vulnerability

Attribute Definition Source: Producer Defined

Attribute Domain Values:

Range Domain:

Range Domain Minimum: 0.05

Range Domain Maximum: 0.85

Attribute Units of Measure: probability

Attribute Measurement Resolution: 0.01

Overview Description:

Entity and Attribute Overview:

Individual csv sheets from an Excel workbook that is imported into program R to implement Bayesian belief network used in Dunn et al. In press at Ecosphere. These sheets would need to be re-combined in order to be imported into the accompanying R code

Entity and Attribute Detail Citation: Dunn et al. in press. Ecosphere

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Format Name: Digital Data

Digital Transfer Option:

Online Option:

Computer Contact Information:

Network Address:

Network Resource Name: https://doi.org/10.5066/P9IBB2K5

Fees: None

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Metadata Reference Information:

Metadata Reference Information:

Metadata Date: 20230911

Metadata Contact:

Contact Information:

Contact Person Primary:

Contact Person: Corey G Dunn

Contact Organization: U.S. Geological Survey, ECOSYSTEMS

Contact Position: Unit Leader, Research Fisheries Biologist

Contact Address:

Address Type: mailing address

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City: Raleigh

State or Province: NC

Postal Code: 27695-7617

Country: US

Contact Voice Telephone: 9195132696

Contact Electronic Mail Address: cdunn@usgs.gov

Metadata Standard Name:

FGDC Biological Data Profile of the Content Standard for Digital Geospatial Metadata

Metadata Standard Version: FGDC-STD-001.1-1999