

Exploring dependencies of multivariate seabird distributions: Linking graphical models to social network analysis

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Summary. Graphical modeling of seabird distributions. Simultaneous estimation of conditional spatial interrelation for a subset of 204 seabird species by means of a spatial dependence graph model (SDGM). Linkage to Social network analysis toolbox to detect the most influential species (in term of importance within the estimated SDGM)

Keywords: Graphical modeling, Species importance, Marked point process, Network centrality measures, Seabird distribution

1. Introduction

Information on the spatial distribution of marine birds is of particular interest to ecologists, environmentalists and policy-makers.

There is a danger in this in that it is generally known that species distributions are not independent. Maps of the spatial distribution of marine birds undoubtedly have some overlap

Models are usually run on either individual species or all-species-combined data. Winiarski et al. (2014) first categorized species into different taxonomic groups before fitting a separate model to each grouping. Balderama et al. (2016) modeled several species individually and created separate distribution maps for each species.

In ecology, Quantifying the spatial dependence structure between bird species and environmental covariates is important. While studies have related the spatial distribution of one species with that of a prey or predator species or of environmental variables acting as proxies for climate (Goyert et al. 2014, 2016), there has been relatively few studies that investigate and utilize measures of inter-species dependence.

Community models may combine several species, known to have facilitative interactions with each other, into one model (Goyert et al. 2016; Sollmann et al. 2016). However, these models treat the observed data the same way as if the observations belong to the same species, i.e., come from the same distribution.

Studying the degree of interaction between species may help inform ocean planning and develop effective strategies for ecosystem management. Mapping the distribution of rare and endangered avian species is important when planning the placement of offshore wind energy developments. Such rare species are obviously difficult to monitor, so finding a more commonly occurring species that is highly dependent with the rare species has ecological importance.

Ecological data usually contains spatial observations from multiple species of interest.

The occurrence of a sea bird species in a particular location is affected (either positively or negatively) by the occurrence of other species in the

same location. Thus, external factors that may cause changes to the distribution of a single species will undoubtedly have an effect on the distribution of other species. Determining these associations between different species has been difficult (Stachowicz 2001), especially when trying to find the associations between many species all at once. Attempts at modeling between-species interactions are often limited to the bivariate case (Andersen 1992; Nightingale et al. 2015). For three or more species, models are usually hindered by computing time due to the estimation of very many interaction parameters (Jalilian et al. 2015).

At the same time, there is a need for fast and practically applicable methods for analyzing multivariate point patterns, and this is currently a growing but challenging topic for researchers (Møller and Waagepetersen 2016).

In this paper, we explore the dependence structure between multiple sea bird species distributions, using the graphical modelling approach of Eckardt and Mateu (2016).

Using this approach, 1. A multivariate analysis of sea bird distributions may be useful in determining how one bird species affects the presence of another.

2. This will help us to categorize observations of unidentified or unknown species to those of identified species.

Observations labelled as “unidentified” are often removed before analyzing data at the species level. Here we include these data and may be able to determine what species they are most likely to be from the resulting network map.

The sea bird data is described, as a multivariate spatially marked point process, in Section 2. We apply the graphical model to the sea bird data

in Section ?? and illustrate some resulting network maps in Section ??.
Concluding remarks are given in Section ??.

2. Data

Data are point locations of marine bird sightings over the Northeast and Mid-Atlantic coast regions of the United States, as described in Balderama et al. (2016). The point locations are the longitude and latitude coordinates of the midpoints of transect segments from boat and aerial strip transect surveys between July, 1998 and April, 2014. Out of 90660 total point locations for potential sightings, 53842 have at least one species sighting. Because more than one species may be sighted in any one location, the full data contains 128812 total species-location combinations. Species are labelled by its common name and a corresponding four-letter species code. The full data contains 306 different codes. Some codes signify an unidentified or partially identified species. For example, the word “unidentified” may accommodate birds that have been identified to a family but not to a species. In this paper, however, we will use the term “species” to refer to different four-letter codes. For our analysis we consider only 204 (out of 306) species that have been sighted in at least three locations. By this, our analysis covers 53820 locations and 128674 species-location combinations.

A sighting is a recorded observation at least one individual bird. In the context of spatially marked point patterns, each sighting corresponds to one point of a species’ point pattern, with the mark of the point being the number of birds observed in that sighting. Table 1 shows the total number of birds observed and the average mark for the twenty most frequently recorded bird species by common name and species code. Observed planar

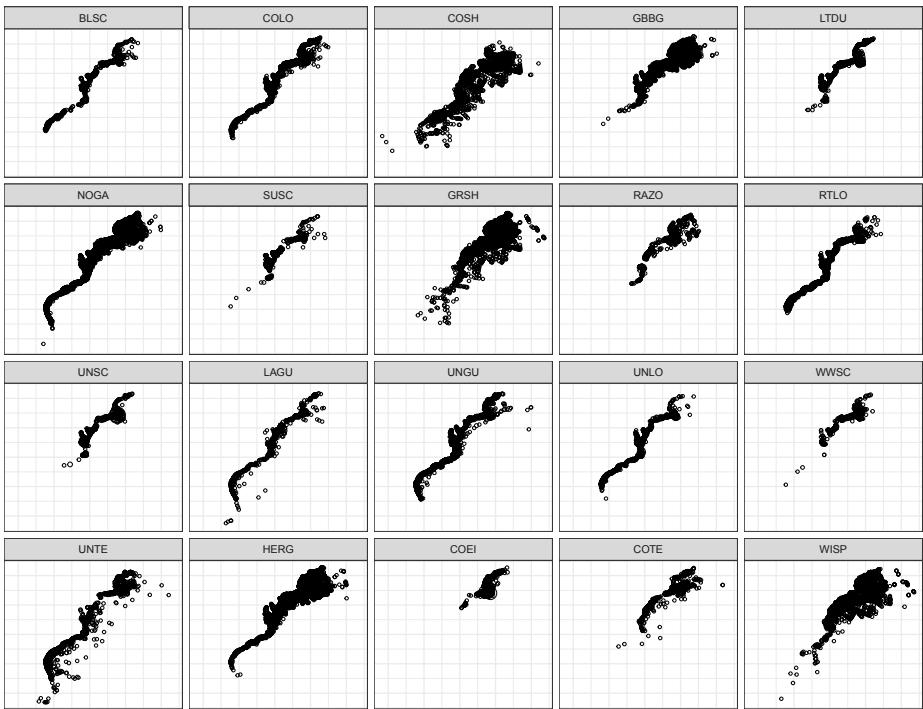


Fig. 1. Spatial point patterns of the 20 most frequently observed marine bird species.

point patterns for these twenty most sighted species are shown in Figure 1.

Table 1: Summary of top 20 most frequently sighted species.

| Species code | Common name | total | sightings | average mark |
|--------------|-------------------------|--------|-----------|--------------|
| BLSC | Black Scoter | 88865 | 2444 | 36.36 |
| COEI | Common Eider | 958282 | 4127 | 232.20 |
| COLO | Common Loon | 17456 | 6795 | 2.57 |
| COSH | Cory's Shearwater | 9434 | 2328 | 4.05 |
| COTE | Common Tern | 15054 | 2212 | 6.81 |
| GBBG | Great Black-backed Gull | 26882 | 7581 | 3.55 |
| GRSH | Greater Shearwater | 64941 | 6213 | 10.45 |
| HERG | Herring gull | 55233 | 10990 | 5.03 |
| LAGU | Laughing Gull | 12535 | 2834 | 4.42 |
| LTDU | Long-tailed Duck | 209151 | 5602 | 37.34 |

Table 1: (*continued*)

| Species code | Common name | total | sightings | average mark |
|--------------|-----------------------|--------|-----------|--------------|
| NOGA | Northern Gannet | 81759 | 12831 | 6.37 |
| RAZO | Razorbill | 17306 | 2410 | 7.18 |
| RTLO | Red-throated Loon | 16039 | 4737 | 3.39 |
| SUSC | Surf Scoter | 106770 | 4059 | 26.30 |
| UNGU | Unidentified Gull | 39067 | 3976 | 9.83 |
| UNLO | Unidentified Loon | 31741 | 3962 | 8.01 |
| UNSC | Unidentified Scoter | 546211 | 3950 | 138.28 |
| UNTE | Unidentified Tern | 24232 | 2331 | 10.40 |
| WISP | Wilson's Storm-petrel | 40689 | 4845 | 8.40 |
| WWSC | White-winged Scoter | 33095 | 2310 | 14.33 |

While some marine bird species, such as various types of gulls, have been sighted at numerous locations, other species occurred only very rarely. At the same time, as we defined a minimum of at least 50 marine birds per species as inclusion criteria, this limited number of locations equivalently implies that certain marine bird species appeared in groupings rather than as isolated birds or occurred only in a geographically strictly-limited habitat. An example of such only rarely observed species are black-capped petrels whose 50 counted sighting have only been recorded at $n = 3$ different locations. This reflects our expectations, as black-capped petrels have been classified as endangered species by the IUCN Red List of Threatened Species. Discovering the relevant subset of species whose spatial occurrence is linked to the spatial pattern of any endangered species by means of a SDGM might provide new insights into multivariate interdependencies. These new insights might provide important knowledge for the conservation of endangered species and might assist to understand such phenomena from a global perspective on different natural environments.

3. Methods

data as multivariate marked spatial point process as defined in Eckardt and Mateu (2016).

literature on point process Chiu et al. (2013), Illian et al. (2008) and Stoyan and Stoyan (1994). For a comprehensive treatment of various models and statistics for marks and points we refer the interested reader to Illian et al. (2008), Baddeley (2010) and Wiegand and Moloney (2013)

- We estimate the conditional spatial dependence structure between different seabird species
- that is, structural dependence between two patterns conditional on all remaining patterns
- so not interrelation between points i and j , but interrelations between components i and j where i and j are sets of points within a bounded planar region.
- edges express the partial (pairwise) interrelation between two species conditional on all remaining species
- we omit to implement a formal test statistic as we assume that dependence might vary between species
- we set a threshold indicating weak/ intermediate partial effects
- we combine spatial dependence graph model with importance tools of social network analysis
- info can provide important insights for species conservation
- eg which are the most important species in the overall graph

Primary idea by Eckardt (2016a), extension to multivariate spp with quantitative marks by Eckardt and Mateu (2016)

Analysis was carried out using the `sdgm` R package of Eckardt (2016b).

For an intense description of different aspects of network analysis we refer the interested reader to Carrington et al. (2005), Kolaczyk (2009) and Goldenberg et al. (2010).

Although graphical modelling and network analysis are two distinct fields and are in general treated separately, the conjunction of both fields could offer additional benefits for the analysis of multivariate spatial data. Especially for the analysis of high-dimensional spatial data one might be interested in the structural importance of a distinct node in a given SDGM. That is, how substantial is the impact of a certain node on the observed network structure. Queries of this type are covered by centrality measures which aim to value the importance of a distinct node in the network. Although a rich methodological toolbox for the structural analysis of (social) network data exist, we only we considered four different centrality measures: the degree, the closeness, the betweenness and the eigenvector centrality (cf. Borgatti and Everett (2006); ?; Newman and Girvan (2004)). Although these measure are similar in spirit, they are different in detail and each of these three centrality measures formalizes a different concept of importance from a (social) network perspective.

meaning Betweenness centrality measures the number of shortest paths going through a specific vertex

Closeness is the mean geodesic distance between a given node and all other nodes with paths from the given node to the other node. This is close to being the mean shortest path, but geodesic distances give higher values for more central nodes.

Eigenvector centrality gives greater weight to a node the more it is connected to other highly connected nodes. A node connected to five high-scoring nodes will have higher eigenvector centrality than a node connected to five low-scoring nodes. Thus, it is often interpreted as measuring a node's network

For our analysis we estimated all marked auto- and cross-spectral densities for all 204 species nonparametrically using a discrete Fourier transform of the demeaned mark values. From this, we computed separate spectra density matrices of dimension 204×204 for all frequencies. To obtain the mSDGM, we finally inverted and rescaled each matrix such that an edge in the mSDGM is equivalent to non-vanishing absolute rescaled marked inverse spectral value in at least one frequency. To capture variation in strength of spatial interdependencies in our data, we choose two arbitrary thresholds α for the edges below of which we assume two patterns as conditional uncorrelated. That is, as our data contains a wide range of differently-sized of marine bird species we assume a variation in strength of spatial interrelations between different types of trees. A similar idea has been proposed by Gather et al. (2002) with respect to intensive care monitoring.

computed two different mSDGMs by using two thresholds $\alpha = 0.3$ and $\alpha = 0.6$.

4. Results

★ in general: important for species conservation: e.g. black-capped petrels only linked to unidentified goldeneyes, both listed as threatened species by IUCN.

★ most important species by means of the degree centrality are uniden-

tified alcids, Arctic terns, barn swallows, red phalaropes, dovekies, buffleheads, brown pelicans, unidentified mergansers and great black-backed gulls.

★ these species are most often linked to alternative species (no. adjacent species)

★ buffleheads, royal terns, unidentified alcids, Arctic terns, common murres, barn swallows, greater shearwaters, manx shearwaters, Bonaparte's gulls and Northern gannets are the most important species by means of the betweenness centrality.

★ these species are most often intermediate species, that is most links from a to b path through these species

For our first mSDGM, we considered a threshold $\alpha = 0.3$ which we interpret as a conditional interrelation of weak effect size. For this, we treated all values of the empirical absolute rescaled marked inverse spectra below $\alpha = 0.3$ as zero. The resulting mSDGM is depicted in Figure 2.

This SDGM consisted of two 4-node subgraphs, a 6- node subgraph and a 153-node subgraph and of 3400 edges. Besides, we also found 37 isolated species (AMCO, AMPI, AMRE, BAOR, BLPW, BRAN, BTBW, BUPE, COYE, FEPE, GCKI, GRCA, LESC, LISH, MABO, MAWA, MERL, NOFL, NOHA NOTE, NOWA, PEFA, RBTR, RCKI, RTHU, RUBL, SAVS, SNBU, SPAR, Surf Scoter, UNHU, UNPT, UNTB, USAN, WTSP, YBCH, YWAR). These findings imply that non of the 37 species are interrelated to any other species taken into account at threshold $\alpha = .3$. This could mean that the isolated nodes tend to represent species whose marked point patterns are different from all remaining marked point patterns taken into account. This is an interesting result as the isolated nodes are related to both frequent and endangered species and

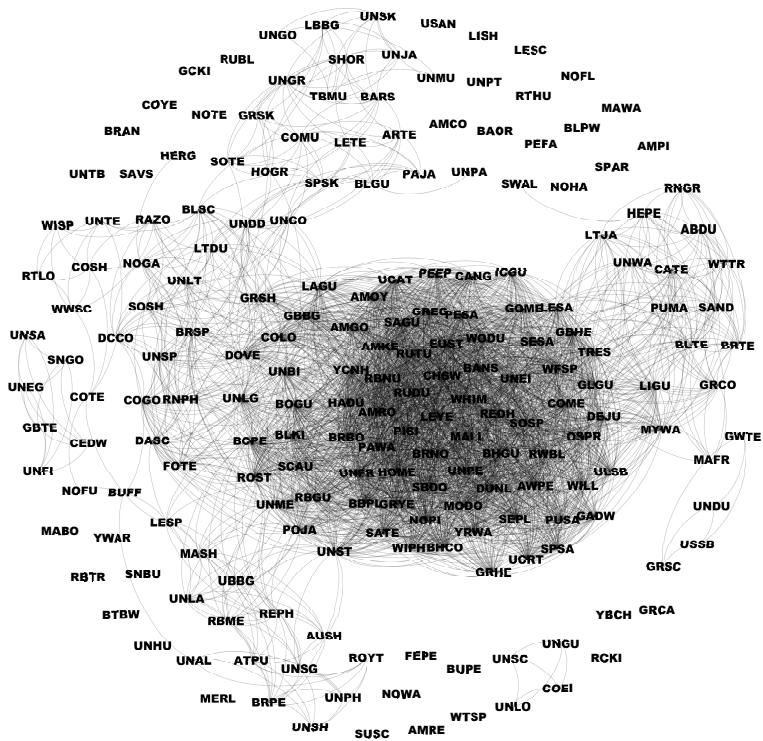


Fig. 2. Marked spatial dependence graph model for the 204 different marine bird species, and bird counts as quantitative mark for a threshold level of $\alpha = 0.3$.

also differently-sized types of marine birds. One reason for this could be due to our sample scheme. We restricted the dataset to a subset of 204 different marine bird species, so while there probably are interrelations of this 37 aerial species to alternative types of birds, the alternative birds did not appear in our subsample. However, the global interrelations within coastal habitat are very complex and are still not completely understood.

Although several findings could be discussed in detail, we only considered structural interdependies for the marked patterns of Roseate Tern, Least Tern and the endangered species Black-capped Petrel, GBHE, YCNH and SAVS.

We begin our discussion with the structural interrelations for Roseate Tern and Least Tern. While we found 62 conditionally interrelated marked patterns for Roseate Tern, we only observed 10 interdependent species for Least Tern. For Roseate Tern, these species are Dovekie, AMGO, AMKE, AMOY, AMRO, BBPL, BHCO, BHGU, Red-necked Phalarope, Red Phalarope, BRBO, CHSW, DUNL, EUST, Forster's Tern, SBDO, GRYE, HADU, HOME, LEYE, NOPI, MALL, Manx Shearwater, PAWA, PEEP, PESA, PISI, RBNU, REDH, RUDU, RUTU, SAGU, SATE, Unidentified Scaup, Pomarine Jaeger, Red-breasted Merganser, Ring-billed Gull, Great or Lesser Black-backed Gull, UCAT, UNBI, UNFR, UNPE, Unidentified Large Alcid , Unidentified Large Gull, Unidentified Merganser, Unidentified Small Tern, BANS, WHIM, GREG, MODO, Unidentified Storm-petrel, WIPH, WODU, YCNH, YRWA, BRSP, BLKI, Black-capped Petrel, BonapArctic Tern's Gull, BRNO, Common Goldeneye and Dark Scoter. For Least Tern we have edges to Common Murre, Barn Swallow, Arctic Tern, Unidentified Cormorant, Unidentified Shorebird, Unidentified Diving/Sea Duck, South Polar Skua, Unidentified Grebe, Black

Guillemotand, Parasitic Jaeger.

For GBHE we observed 74 direct interrelations to alternative marine birds, namely AMGO, AMKE, AMOY, AMRO, BBPL, BHCO, BHGU, GRCO, BRBO, CATE, CHSW, COME, DEJU, DUNL, EUST, GADW, GRHE, SBDO, GRYE, HADU, HOME, LESA, LEYE, LIGU, NOPI, HEPE, ICGU, LTJA, MALL, OSPR, PAWA, PEEP, PESA, PISI, PUMA, PUSA, RBNM, REDH, RUDU, RUTU, RWBL, SAGU, SAND, SATE, SEPL, SESA, SOSP, SPSA, TRES, UCAT, ULSB, UNEI, UNFR, UNPE, BANS, UNWA, MYWA, WFSP, WHIM, GLGU, GOME, GREG, MODO, BRTE, WILL, WIPH, WODU, YCNH, YRWA, UCRT, BLTE, BRNO, CANG, and, lastly, AWPE. **These birds are**

Similarly, focussing on the interrelation which are present for YCNH, we found 79 links. These interdependent species are AWPE, Common Loon, Dovekie, Great Black-backed Gull, AMGO, AMKE, AMOY, AMRO, BBPL, BHCO, BHGU, Great Shearwater, Roseate Tern, BRBO, CHSW, COME, DEJU, DUNL, EUST, GADW, GRHE, GBHE, SBDO, GRYE, HADU, HOME, LESA, LEYE, NOPI, ICGU, Laughing Gull, MALL, OSPR, PAWA, PEEP, PESA, PISI, PUSA, RBNM, REDH, RUDU, RUTU, RWBL, SAGU, SATE, Unidentified Scaup, SEPL, SESA, SOSP, Po-marine Jaeger, Ring-billed Gull, SPSA, TRES, UCAT, ULSB, UNBI, UNEI, UNFR, UNPE, Unidentified Large Gull, Unidentified Merganser, Unidentified Small Tern, BANS, WFSP, WHIM, GLGU, GOME, GREG, MODO, WILL, WIPH, WODU, YRWA, UCRT, BLKI, Black-capped Petrel, BonapArctic Tern's Gull, BRNO and CANG. **These birds are**

For Black-capped Petrel, we found 64 alternative marked point patterns which are directly interrelated to the spatial marked pattern of Black-capped Petrel. These species are Dovekie, AMGO, AMKE, AMOY,

AMRO, BBPL, BHCO, BHGU, Red-necked Phalarope, Red Phalarope, Roseate Tern, BRBO, CHSW, DUNL, EUST, Forster's Tern, SBDO, GRYE, HADU, HOME, LEYE, NOPI, Horned Grebe, Laughing Gull, MALL, Manx Shearwater, PAWA, PESA, PISI, RBNU, REDH, RUDU, RUTU, SAGU, SATE, Unidentified Scaup, Pomarine Jaeger, Red-breasted Merganser, Ring-billed Gull, Sooty Shearwater, Great or Lesser Black-backed Gull, UCAT, UNBI, UNFR, UNPE, Unidentified Large Alcid , Unidentified Large Gull, Unidentified Merganser, Unidentified Small Tern, BANS, WHIM, GREG, MODO, Unidentified Storm-petrel, WIPH, WODU, YCNH, YRWA, BRSP, BLKI, BonapArctic Tern's Gull, BRNO, Common Goldeneye, and Dark Scoter. **These birds are**

Interestingly, SAVS is isolated in both SDGMs

These findings imply the presence of complex conditional interdependencies between the marked spatial pattern of GBHF and also YCNH to a wide range of alternative species whereas we found no spatial interdependencies for SAVS to any alternative species taken into account.

As a second model, we also computed a SDGM for a threshold $\alpha = .6$. (we interprete this as interdependencies of intermediate effect size). The resulting mSDGM is depicted in Figure 3.

In this SGDM, we observed two pairs of joined nodes, a 3-node subgraph, a 4-node subgraph, a 6-node subgraph, a 7-node subgraph, a 8-node subgraph, a 10-node subgraph, a 49-node subgraph and a , a 4-node subgraph, a 6-node subgraph, a 71-node subgraph and 1880 edges. In addition, we also found 42 isolated nodes, namely AMCO, AMPI, AMRE, BAOR, BLPW, BRAN, BTBW, BUPE, COYE, FEPE, GCKI, GRCA, Herring Gull, LESC, LISH, MABO, MAFR, MAWA, MERL, NOFL, NOHA, NOTE, NOWA, PEFA, RBTR, RCKI, RTHU, RUBL,

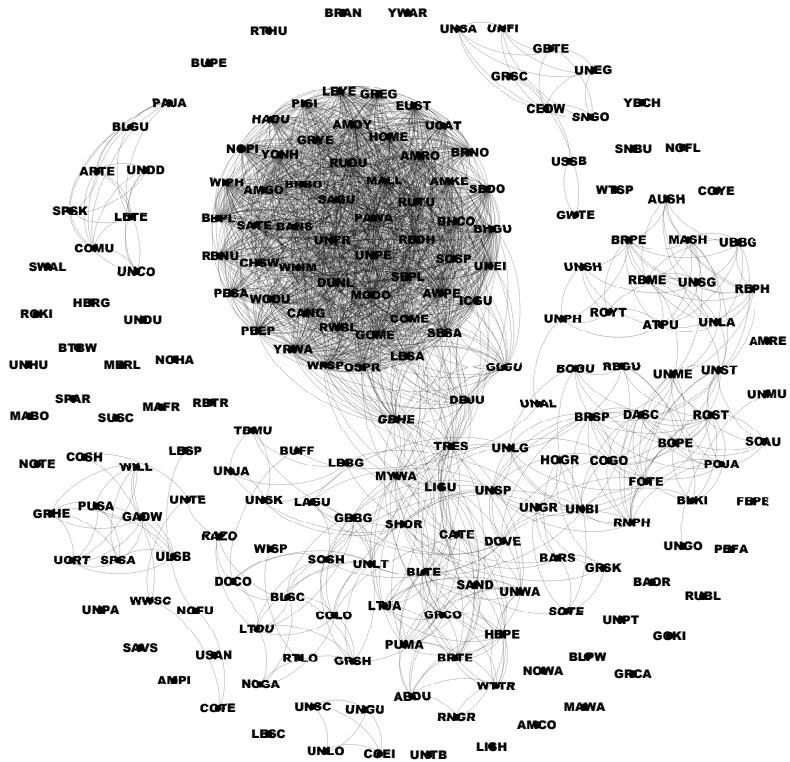


Fig. 3. Marked spatial dependence graph model for the 204 different marine bird species, and bird counts as quantitative mark for a threshold level of $\alpha = 0.3$.

SAVS, SNBU, SPAR, Surf Scoter, SWAL, UNDU, UNHU, Unidentified Passerine, UNPT, UNTB, USAN, WTSP, YBCH, YWAR. Again, for the isolated nodes, we concluded that none of marked spatial patterns of these species is conditionally interdependent to any alternative marked pattern taken into account at a threshold $\alpha = .6$.

As before, we first discuss the spatial interdependencies for Roseate Tern and Least Tern. In contrast to our previous findings, only 13 edges remain for Roseate Tern at a threshold $\alpha = .6$, namely Red-necked Phalarope, Forster's Tern, Unidentified Scaup, Pomarine Jaeger, Ring-billed Gull, Unidentified Merganser, Unidentified Small Tern, BRSP, BLKI, Black-capped Petrel, BonapArctic Tern's Gull, Common Golden-eye, and Dark Scoter.

Least Tern is linked to 7 from 204 species, named: Common Murre Arctic Tern Unidentified Cormorant Unidentified Diving/Sea Duck South Polar Skua Black Guillemot Parasitic Jaeger

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With respect to the marked spatial pattern of GBHE, the neighborhood consisted of 41 alternative species, namely AWPEBANS, BHCO, BHGU, BLTE, CATE, CANG, CHSW, COME, DEJU, DUNL, GLGU, GOME, GRCO, LESA, LIGU, ICGU, LTJA, MALL, MODO, MYWA, OSPR, PAWA, PEEP, PUMA, REDH, RUTU, RWBL, SAND, SEPL, SESA, SOSP, TRES, UNEI, UNFR, UNPE, UNWA, YRWA, WFSP, WHIM, and WODU.

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For YCNH we detected 52 interrelated species at a threshold $\alpha = .6$. AMGO, AMKE, AMOY, AMRO, BBPL, BHCO, BHGU, BRBO, CHSW, COME, DUNL, EUST, SBDO, GRYE, HADU, HOME, LESA, LEYE,

NOPI, ICGU, MALL, OSPR, PAWA, PEEP, PESA, PISI, RBNU, REDH, RUDU, RUTU, RWBL, SAGU, SATE, SEPL, SESA, SOSP, UCAT, UNEI, UNFR, UNPE, BANS, WFSP, WHIM, GOME, GREG, MODO, WIPH, WODU, YRWA, BRNO, CANG and AWPE.

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Similarly, only 13 conditional interdependencies remained with respect to the marked pattern of Black-capped Petrel for a threshold $\alpha = .6$ including the marked point patterns of Red-necked Phalarope, Roseate Tern, Forster's Tern, Unidentified Scaup, Pomarine Jaeger, Ring-billed Gull, Unidentified Merganser, Unidentified Small Tern, BRSP, BLKI, BonapArctic Tern's Gull, Common Goldeneye and also Dark Scoter.

To detect the most influential species within our data, we compute 4 different centrality measures (listed Table 2). The results for the threshold $\alpha = .3$ are listed below, isolated species excluded.

betweenness centrality is shown in Figure 4

For this plot, we found that BCPE is the most important marine bird species by means of the betweenness centrality measure. Besides BCPE, we observed a high importance of UNST, HOGR as well as GBBG amongst other species.

Similar calculations have been performed for the threshold $\alpha = 0.6$.

The results are given below, isolated species excluded.

| | | | | | |
|-----|------|----|-----------|--------------|--------------|
| 39 | COME | 58 | 49.987456 | 3.674174e-05 | 1.000000e+00 |
| 59 | LESA | 58 | 49.987456 | 3.674174e-05 | 1.000000e+00 |
| 82 | OSPR | 58 | 49.987456 | 3.674174e-05 | 1.000000e+00 |
| 104 | SESA | 58 | 49.987456 | 3.674174e-05 | 1.000000e+00 |
| 155 | WFSP | 58 | 49.987456 | 3.674174e-05 | 1.000000e+00 |
| 160 | GOME | 58 | 49.987456 | 3.674174e-05 | 1.000000e+00 |

Table 2. Centrality measures for SDGM for threshold $\alpha = .3$. Isolated nodes excluded.

| <i>code</i> | <i>degree</i> | <i>betweenness</i> | <i>closeness</i> | <i>eigen</i> |
|-------------|---------------|--------------------|------------------|------------------|
| MALL | 80 | 80.370354 | $9.37E - 05$ | $1.000000e + 00$ |
| BANS | 80 | 80.370354 | $9.37E - 05$ | $1.000000e + 00$ |
| WHIM | 80 | 80.370354 | $9.37E - 05$ | $1.000000e + 00$ |
| WODU | 80 | 80.370354 | $9.37E - 05$ | $1.000000e + 00$ |
| AMKE | 79 | 64.521344 | $9.37E - 05$ | $9.930130e - 01$ |
| AMRO | 79 | 64.521344 | $9.37E - 05$ | $9.930130e - 01$ |
| BBPL | 79 | 64.521344 | $9.37E - 05$ | $9.930130e - 01$ |
| BHCO | 79 | 74.852463 | $9.37E - 05$ | $9.917427e - 01$ |
| BRBO | 79 | 64.521344 | $9.37E - 05$ | $9.930130e - 01$ |
| CHSW | 79 | 64.521344 | $9.37E - 05$ | $9.930130e - 01$ |
| EUST | 79 | 64.521344 | $9.37E - 05$ | $9.930130e - 01$ |
| SBDO | 79 | 64.521344 | $9.37E - 05$ | $9.930130e - 01$ |
| GRYE | 79 | 64.521344 | $9.37E - 05$ | $9.930130e - 01$ |
| HADU | 79 | 64.521344 | $9.37E - 05$ | $9.930130e - 01$ |
| HOME | 79 | 64.521344 | $9.37E - 05$ | $9.930130e - 01$ |
| LEYE | 79 | 64.521344 | $9.37E - 05$ | $9.930130e - 01$ |
| NOPI | 79 | 64.521344 | $9.37E - 05$ | $9.930130e - 01$ |
| PAWA | 79 | 64.521344 | $9.37E - 05$ | $9.930130e - 01$ |
| PESA | 79 | 64.521344 | $9.37E - 05$ | $9.930130e - 01$ |
| PISI | 79 | 64.521344 | $9.37E - 05$ | $9.930130e - 01$ |
| RBNU | 79 | 64.521344 | $9.37E - 05$ | $9.930130e - 01$ |
| RUDU | 79 | 64.521344 | $9.37E - 05$ | $9.930130e - 01$ |
| RUTU | 79 | 64.521344 | $9.37E - 05$ | $9.930130e - 01$ |
| SAGU | 79 | 64.521344 | $9.37E - 05$ | $9.930130e - 01$ |
| SATE | 79 | 64.521344 | $9.37E - 05$ | $9.930130e - 01$ |
| UNFR | 79 | 64.521344 | $9.37E - 05$ | $9.930130e - 01$ |
| UNPE | 79 | 74.852463 | $9.37E - 05$ | $9.917427e - 01$ |
| GREG | 79 | 64.521344 | $9.37E - 05$ | $9.930130e - 01$ |
| WIPH | 79 | 64.521344 | $9.37E - 05$ | $9.930130e - 01$ |
| YCNH | 79 | 64.521344 | $9.37E - 05$ | $9.930130e - 01$ |
| BRNO | 79 | 64.521344 | $9.37E - 05$ | $9.930130e - 01$ |
| BHGU | 78 | 70.510241 | $9.37E - 05$ | $9.829660e - 01$ |
| DUNL | 78 | 70.510241 | $9.37E - 05$ | $9.829660e - 01$ |

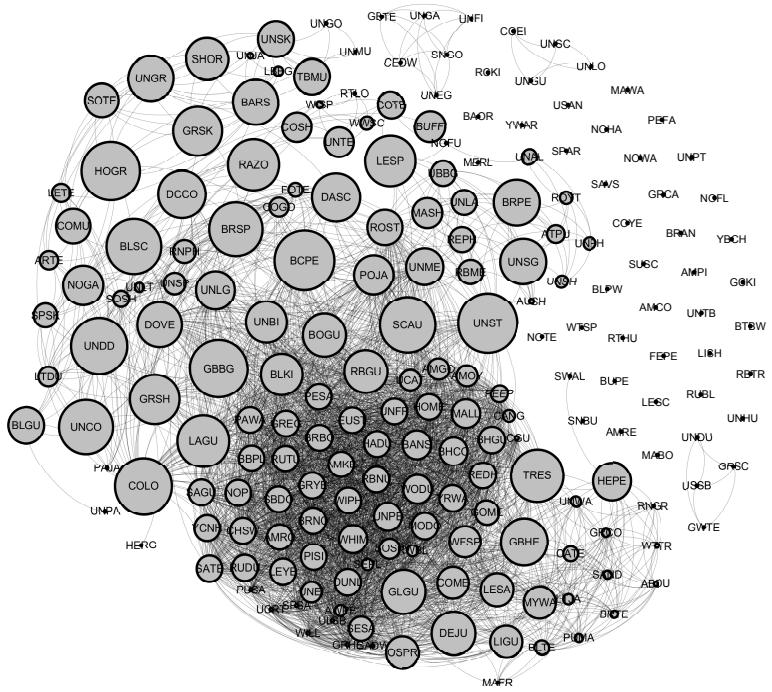


Fig. 4. Betweenness centrality for the marked spatial dependence graph model for the 204 different marine bird species, and bird counts as quantitative mark for a threshold level of $\alpha = 0.3$.

| | | | | | |
|-----|------|----|-----------|--------------|--------------|
| 74 | ICGU | 56 | 19.908538 | 3.673904e-05 | 9.943346e-01 |
| 97 | RWBL | 56 | 19.908538 | 3.673904e-05 | 9.943346e-01 |
| 103 | SEPL | 56 | 19.908538 | 3.673904e-05 | 9.943346e-01 |
| 107 | SOSP | 56 | 19.908538 | 3.673904e-05 | 9.943346e-01 |
| 123 | UNEI | 56 | 19.908538 | 3.673904e-05 | 9.943346e-01 |
| 203 | AWPE | 56 | 19.908538 | 3.673904e-05 | 9.943346e-01 |
| 23 | BHCO | 55 | 8.418041 | 3.673364e-05 | 9.894355e-01 |
| 24 | BHGU | 55 | 8.418041 | 3.673364e-05 | 9.894355e-01 |
| 42 | DUNL | 55 | 8.418041 | 3.673364e-05 | 9.894355e-01 |
| 93 | REDH | 55 | 8.418041 | 3.673364e-05 | 9.894355e-01 |
| 130 | UNPE | 55 | 8.418041 | 3.673364e-05 | 9.894355e-01 |
| 163 | MODO | 55 | 8.418041 | 3.673364e-05 | 9.894355e-01 |
| 175 | YRWA | 55 | 8.418041 | 3.673364e-05 | 9.894355e-01 |
| 195 | CANG | 55 | 8.418041 | 3.673364e-05 | 9.894355e-01 |
| 38 | CHSW | 53 | 4.526542 | 3.673095e-05 | 9.742804e-01 |
| 79 | MALL | 53 | 4.526542 | 3.673095e-05 | 9.742804e-01 |
| 83 | PAWA | 53 | 4.526542 | 3.673095e-05 | 9.742804e-01 |
| 84 | PEEP | 53 | 4.526542 | 3.673095e-05 | 9.742804e-01 |
| 96 | RUTU | 53 | 4.526542 | 3.673095e-05 | 9.742804e-01 |
| 124 | UNFR | 53 | 4.526542 | 3.673095e-05 | 9.742804e-01 |
| 150 | BANS | 53 | 4.526542 | 3.673095e-05 | 9.742804e-01 |
| 156 | WHIM | 53 | 4.526542 | 3.673095e-05 | 9.742804e-01 |
| 171 | WODU | 53 | 4.526542 | 3.673095e-05 | 9.742804e-01 |
| 14 | AMGO | 52 | 0.000000 | 3.671746e-05 | 9.636128e-01 |
| 15 | AMKE | 52 | 0.000000 | 3.671746e-05 | 9.636128e-01 |
| 16 | AMOY | 52 | 0.000000 | 3.671746e-05 | 9.636128e-01 |
| 19 | AMRO | 52 | 0.000000 | 3.671746e-05 | 9.636128e-01 |

| | | | | | |
|-----|------|----|------------|--------------|--------------|
| 22 | BBPL | 52 | 0.000000 | 3.671746e-05 | 9.636128e-01 |
| 35 | BRBO | 52 | 0.000000 | 3.671746e-05 | 9.636128e-01 |
| 43 | EUST | 52 | 0.000000 | 3.671746e-05 | 9.636128e-01 |
| 53 | SBDO | 52 | 0.000000 | 3.671746e-05 | 9.636128e-01 |
| 54 | GRYE | 52 | 0.000000 | 3.671746e-05 | 9.636128e-01 |
| 56 | HADU | 52 | 0.000000 | 3.671746e-05 | 9.636128e-01 |
| 57 | HOME | 52 | 0.000000 | 3.671746e-05 | 9.636128e-01 |
| 61 | LEYE | 52 | 0.000000 | 3.671746e-05 | 9.636128e-01 |
| 69 | NOPI | 52 | 0.000000 | 3.671746e-05 | 9.636128e-01 |
| 86 | PESA | 52 | 0.000000 | 3.671746e-05 | 9.636128e-01 |
| 87 | PISI | 52 | 0.000000 | 3.671746e-05 | 9.636128e-01 |
| 90 | RBNU | 52 | 0.000000 | 3.671746e-05 | 9.636128e-01 |
| 95 | RUDU | 52 | 0.000000 | 3.671746e-05 | 9.636128e-01 |
| 98 | SAGU | 52 | 0.000000 | 3.671746e-05 | 9.636128e-01 |
| 100 | SATE | 52 | 0.000000 | 3.671746e-05 | 9.636128e-01 |
| 118 | UCAT | 52 | 0.000000 | 3.671746e-05 | 9.636128e-01 |
| 161 | GREG | 52 | 0.000000 | 3.671746e-05 | 9.636128e-01 |
| 170 | WIPH | 52 | 0.000000 | 3.671746e-05 | 9.636128e-01 |
| 174 | YCNH | 52 | 0.000000 | 3.671746e-05 | 9.636128e-01 |
| 193 | BRNO | 52 | 0.000000 | 3.671746e-05 | 9.636128e-01 |
| 52 | GBHE | 41 | 315.767672 | 3.672150e-05 | 5.731912e-01 |
| 41 | DEJU | 26 | 18.848384 | 3.669994e-05 | 4.071560e-01 |
| 116 | TRES | 26 | 170.399687 | 3.670264e-05 | 2.632387e-01 |
| 159 | GLGU | 26 | 18.848384 | 3.669994e-05 | 4.071560e-01 |
| 62 | LIGU | 20 | 75.510551 | 3.669455e-05 | 1.522058e-01 |
| 154 | MYWA | 20 | 75.510551 | 3.669455e-05 | 1.522058e-01 |
| 36 | CATE | 15 | 23.242211 | 3.665555e-05 | 4.061106e-02 |

| | | | | | |
|-----|------|----|------------|--------------|--------------|
| 146 | UNST | 15 | 188.485579 | 3.148515e-05 | 1.989399e-16 |
| 26 | GRCO | 14 | 23.098542 | 3.665420e-05 | 2.550392e-02 |
| 72 | HEPE | 14 | 65.661463 | 3.663138e-05 | 1.484379e-02 |
| 88 | PUMA | 14 | 23.098542 | 3.665420e-05 | 2.550392e-02 |
| 99 | SAND | 14 | 23.098542 | 3.665420e-05 | 2.550392e-02 |
| 142 | UNME | 14 | 137.727271 | 3.148416e-05 | 1.492049e-16 |
| 191 | BLTE | 14 | 23.098542 | 3.665420e-05 | 2.550392e-02 |
| 6 | DOVE | 13 | 111.950982 | 3.149309e-05 | 9.946995e-17 |
| 29 | RNPH | 13 | 63.299561 | 3.149309e-05 | 1.492049e-16 |
| 32 | ROST | 13 | 25.728846 | 3.147524e-05 | 4.973498e-17 |
| 45 | FOTE | 13 | 63.299561 | 3.149309e-05 | 9.946995e-17 |
| 120 | UNBI | 13 | 94.166508 | 3.149309e-05 | 4.973498e-17 |
| 140 | UNLG | 13 | 82.258497 | 3.149210e-05 | 0.000000e+00 |
| 151 | UNWA | 13 | 9.715423 | 3.665286e-05 | 2.545595e-02 |
| 165 | BRTE | 13 | 7.718029 | 3.663004e-05 | 1.483630e-02 |
| 167 | UNSP | 13 | 113.383211 | 3.149408e-05 | 0.000000e+00 |
| 188 | BRSP | 13 | 63.299561 | 3.149309e-05 | 9.946995e-17 |
| 190 | BCPE | 13 | 25.728846 | 3.147524e-05 | 4.973498e-17 |
| 197 | COGO | 13 | 63.299561 | 3.149309e-05 | 1.492049e-16 |
| 78 | LTJA | 12 | 1.513058 | 3.665152e-05 | 2.538510e-02 |
| 112 | SOSH | 12 | 112.611727 | 3.148813e-05 | 4.973498e-17 |
| 126 | UNLT | 12 | 112.611727 | 3.148813e-05 | 4.973498e-17 |
| 202 | DASC | 12 | 45.798378 | 3.149110e-05 | 4.973498e-17 |
| 108 | POJA | 11 | 7.328846 | 3.147326e-05 | 0.000000e+00 |
| 185 | BRPE | 11 | 54.509180 | 3.144951e-05 | 9.946995e-17 |
| 7 | GBBG | 10 | 38.630214 | 3.148020e-05 | 1.243374e-16 |
| 31 | REPH | 10 | 39.426508 | 3.146138e-05 | 7.460246e-17 |

| | | | | | |
|-----|------|----|------------|--------------|--------------|
| 80 | MASH | 10 | 39.426508 | 3.146138e-05 | 7.460246e-17 |
| 109 | RBME | 10 | 39.426508 | 3.146138e-05 | 4.973498e-17 |
| 139 | UNLA | 10 | 39.426508 | 3.146138e-05 | 4.973498e-17 |
| 145 | UNSG | 10 | 19.096963 | 3.143666e-05 | 9.946995e-17 |
| 148 | WTIR | 10 | 6.133804 | 3.657778e-05 | 3.806856e-03 |
| 183 | ATPU | 10 | 42.362745 | 3.144852e-05 | 7.460246e-17 |
| 1 | BLSC | 9 | 90.311158 | 3.147029e-05 | 4.973498e-17 |
| 2 | COLO | 9 | 40.043107 | 3.147723e-05 | 7.460246e-17 |
| 8 | LTDU | 9 | 90.311158 | 3.147029e-05 | 1.243374e-16 |
| 117 | UBBG | 9 | 19.483694 | 3.146039e-05 | 9.946995e-17 |
| 12 | ABDU | 8 | 3.277441 | 3.657243e-05 | 2.577287e-03 |
| 27 | GRSH | 8 | 17.044593 | 3.147425e-05 | 4.973498e-17 |
| 114 | SHOR | 8 | 11.666667 | 2.526146e-05 | 7.460246e-17 |
| 3 | COMU | 7 | 1.000000 | 2.500563e-05 | 7.460246e-17 |
| 25 | ARTE | 7 | 1.000000 | 2.500563e-05 | 4.973498e-17 |
| 77 | LETE | 7 | 1.000000 | 2.500563e-05 | 0.000000e+00 |
| 133 | SPSK | 7 | 1.000000 | 2.500563e-05 | 4.973498e-17 |
| 179 | AUSH | 7 | 0.000000 | 3.143369e-05 | 7.460246e-17 |
| 5 | DCCO | 6 | 175.595538 | 3.147524e-05 | 7.460246e-17 |
| 21 | BARS | 6 | 2.416667 | 2.526018e-05 | 2.486749e-17 |
| 46 | GADW | 6 | 0.000000 | 2.487934e-05 | 6.216872e-17 |
| 50 | GRHE | 6 | 0.000000 | 2.487934e-05 | 8.703621e-17 |
| 58 | LBBG | 6 | 4.000000 | 2.526018e-05 | 4.973498e-17 |
| 75 | LAGU | 6 | 0.000000 | 3.146831e-05 | 2.486749e-17 |
| 89 | PUSA | 6 | 0.000000 | 2.487934e-05 | 7.460246e-17 |
| 102 | SCAU | 6 | 0.000000 | 3.146534e-05 | 2.486749e-17 |
| 110 | RBGU | 6 | 3.511946 | 3.147128e-05 | 7.460246e-17 |

| | | | | | |
|-----|------|---|------------|--------------|--------------|
| 115 | SPSA | 6 | 0.000000 | 2.487934e-05 | 2.486749e-17 |
| 119 | ULSB | 6 | 0.000000 | 2.487934e-05 | 6.216872e-17 |
| 137 | UNGR | 6 | 2.416667 | 2.526018e-05 | 3.730123e-17 |
| 169 | WILL | 6 | 0.000000 | 2.487934e-05 | 6.216872e-17 |
| 178 | UCRT | 6 | 0.000000 | 2.487934e-05 | 4.973498e-17 |
| 189 | BLKI | 6 | 2.498296 | 3.146930e-05 | 4.973498e-17 |
| 192 | BOGU | 6 | 3.511946 | 3.147128e-05 | 4.973498e-17 |
| 33 | UNCO | 5 | 0.000000 | 2.500438e-05 | 4.973498e-17 |
| 37 | CEDW | 5 | 0.000000 | 2.475431e-05 | 6.216872e-17 |
| 47 | GBTE | 5 | 0.000000 | 2.475431e-05 | 6.216872e-17 |
| 71 | GRSK | 5 | 0.750000 | 2.525954e-05 | 6.216872e-17 |
| 106 | SNGO | 5 | 0.000000 | 2.475431e-05 | 4.973498e-17 |
| 111 | ROYT | 5 | 2.753559 | 3.142184e-05 | 4.973498e-17 |
| 113 | SOTE | 5 | 0.750000 | 2.525954e-05 | 4.973498e-17 |
| 121 | UNDD | 5 | 0.000000 | 2.500438e-05 | 7.460246e-17 |
| 122 | UNEG | 5 | 0.000000 | 2.475431e-05 | 3.730123e-17 |
| 144 | UNSA | 5 | 0.000000 | 2.475431e-05 | 4.973498e-17 |
| 177 | UNFI | 5 | 0.000000 | 2.475431e-05 | 3.730123e-17 |
| 184 | BLGU | 5 | 0.000000 | 2.500438e-05 | 6.216872e-17 |
| 187 | PAJA | 5 | 0.000000 | 2.500438e-05 | 3.730123e-17 |
| 200 | UNPH | 5 | 94.621344 | 3.143962e-05 | 4.973498e-17 |
| 201 | UNSH | 5 | 2.753559 | 3.142184e-05 | 3.730123e-17 |
| 10 | NOGA | 4 | 0.000000 | 3.144654e-05 | 3.730123e-17 |
| 28 | RAZO | 4 | 252.000000 | 3.144654e-05 | 3.730123e-17 |
| 73 | HOGR | 4 | 0.000000 | 2.525699e-05 | 3.730123e-17 |
| 129 | UNJA | 4 | 0.000000 | 2.525827e-05 | 3.730123e-17 |
| 134 | TBMU | 4 | 0.000000 | 2.525827e-05 | 0.000000e+00 |

| | | | | | |
|-----|------|---|------------|--------------|--------------|
| 166 | UNSK | 4 | 0.000000 | 2.525827e-05 | 2.486749e-17 |
| 34 | UNSC | 3 | 0.000000 | 2.450800e-05 | 3.730123e-17 |
| 94 | RNGR | 3 | 0.000000 | 3.654169e-05 | 4.025636e-04 |
| 138 | UNGU | 3 | 0.000000 | 2.450800e-05 | 4.351810e-17 |
| 141 | UNLO | 3 | 0.000000 | 2.450800e-05 | 4.351810e-17 |
| 149 | WWSC | 3 | 135.000000 | 3.137058e-05 | 2.486749e-17 |
| 168 | UNTE | 3 | 215.000000 | 3.140999e-05 | 4.351810e-17 |
| 196 | COEI | 3 | 0.000000 | 2.450800e-05 | 3.730123e-17 |
| 4 | COSH | 2 | 0.000000 | 3.136763e-05 | 3.108436e-17 |
| 9 | NOFU | 2 | 47.000000 | 3.128422e-05 | 1.243374e-17 |
| 51 | GRSC | 2 | 0.000000 | 2.438668e-05 | 2.486749e-17 |
| 55 | GWIE | 2 | 0.000000 | 2.438668e-05 | 1.865062e-17 |
| 135 | UNAL | 2 | 92.131464 | 3.143962e-05 | 2.486749e-17 |
| 153 | USSB | 2 | 0.000000 | 2.438668e-05 | 1.243374e-17 |
| 194 | BUFF | 2 | 105.144842 | 3.145445e-05 | 1.865062e-17 |
| 198 | COTE | 2 | 92.000000 | 3.132832e-05 | 1.865062e-17 |
| 30 | RTLO | 1 | 0.000000 | 2.426654e-05 | 9.325308e-18 |
| 76 | LESP | 1 | 0.000000 | 3.123829e-05 | 9.325308e-18 |
| 125 | UNGO | 1 | 0.000000 | 2.426654e-05 | 9.325308e-18 |
| 143 | UNMU | 1 | 0.000000 | 2.426654e-05 | 6.216872e-18 |
| 199 | WISP | 1 | 0.000000 | 2.426654e-05 | 6.216872e-18 |

5. Discussion

Methods for studying multivariate species distributions are still not well developed. Future research may focus on niche partitioning and finding common areas of species overlap.

Identifying ecologically important areas for community assemblages is important in marine spatial planning (Ehler and Douvere 2009), and our study suggests that a diverse set of species may attract (or repel) each other to (or from) feeding areas. We recommend a synthesis of community and ecosystem approaches in applied conservation management, since facilitation and competition fundamentally shape dynamic environmental processes.

Neighbors for $\alpha = 0.3$

We found the following structure for the threshold $\alpha = .3$

species BLSC
is linked to 18 from 204 species , named:
COLO COMU COSH DCCO DOVE GBBG LTDU NOGA
GRSH RAZO LAGU SOSH UNBI UNLT SPSK
UNLG UNSP UNTE

species COLO
is linked to 60 from 204 species
BLSC DCCO DOVE GBBG LTDU NOGA AMGO AMKE
AMOY AMRO BBPL BHCO BHGU GRSH RAZO
RNPH UNCO BRBO CHSW DUNL EUST FOTE SBDO
GRYE HADU HOME LEYE NOPI LAGU MALL
PAWA PEEP PESA PISI RBNU REDH RUDU RUTU
SAGU SATE SOSH UCAT UNBI UNDD UNFR
UNLT UNPE UNLG BANS WHIM GREG MODO UNSP
WIPH WODU YCNH YRWA BRSP BRNO COGO

species COMU

is linked to 13 from 204 species , named:

BLSC BARS ARTE UNCO GRSK HOGR LETE SOTE
UNDD SPSK UNGR BLGU PAJA

species COSH

is linked to 7 from 204 species , named:

BLSC RAZO RTLO WWSC UNTE COTE WISP

species DCCO

is linked to 18 from 204 species , named:

BLSC COLO DOVE GBBG LTDU NOGA GRSH RAZO
RNPH FOTE LAGU SOSH UNLT UNLG UNSP
BRSP BUFF COGO

species DOVE

is linked to 56 from 204 species , named:

BLSC COLO DCCO GBBG LTDU AMGO AMKE AMOY
AMRO BBPL GRSH RNPH ROST UNCO BRBO
CHSW EUST FOTE SBDO GRYE HADU HOME LEYE
NOPI LAGU MALL PAWA PESA PISI RBNU
RUDU RUTU SAGU SATE POJA RBGU SOSH UCAT
UNBI UNFR UNLT UNLG BANS WHIM GREG
UNSP WIPH WODU YCNH BRSP BLKI BCPE BOGU BRNO COGO DASC

species GBBG

is linked to 63 from 204 species , named:

BLSC COLO DCCO DOVE LTDU NOGA AMGO AMKE AMOY
AMRO BBPL BHCO BHGU GRSH RAZO
RNPH UNCO BRBO CHSW DUNL EUST FOTE SBDO GRYE
HADU HOME LEYE NOPI LAGU MALL
PAWA PEEP PESA PISI RBNU REDH RUDU RUTU SAGU
SATE SOSP SOSH UCAT UNBI UNDD
UNEI UNFR UNLT UNPE UNLG BANS WHIM GREG MODO
UNSP WIPH WODU YCNH YRWA BRSP
BRNO COGO DASC

species LTDU

is linked to 17 from 204 species , named:

BLSC COLO DCCO DOVE GBBG NOGA GRSH RAZO UNCO
LAGU SOSH UNBI UNDD UNLT SPSK
UNLG UNSP

species NOFU

is linked to 2 from 204 species , named:

LESP COTE

species NOGA

is linked to 17 from 204 species , named:

BLSC COLO DCCO GBBG LTDU GRSH RAZO RNPH FOTE LAGU
SOSH UNDD UNLT UNSP HERG
BRSP COGO

species SUSC

is linked to 0 from 204 species

species ABDU

is linked to 14 from 204 species , named:

GRCO CATE LIGU HEPE LTJA PUMA RNGR SAND TRES
WTIR UNWA MYWA BRTE BLTE

species AMCO

is linked to 0 from 204 species

species AMGO

is linked to 72 from 204 species , named:

COLO DOVE GBBG AMKE AMOY AMRO BBPL BHCO BHGU
GRSH ROST BRBO CHSW COME DEJU
DUNL EUST GBHE SBDO GRYE HADU HOME LESA LEYE
NOPI ICGU LAGU MALL OSPR PAWA
PEEP PESA PISI RBNU REDH RUDU RUTU RWBL SAGU
SATE SCAU SEPL SESA SOSP POJA
RBGU TRES UCAT UNBI UNEI UNFR UNPE UNLG UNME
UNST BANS WFSP WHIM GLGU GOME
GREG MODO WIPH WODU YCNH YRWA BLKI BCPE BOGU BRNO
CANG AWPE

species AMKE

is linked to 79 from 204 species , named:

COLO DOVE GBBG AMGO AMOY AMRO BBPL BHCO
BHGU GRSH ROST BRBO CHSW COME DEJU

DUNL EUST GADW GRHE GBHE SBDO GRYE HADU
HOME LESA LEYE NOPI ICGU LAGU MALL
OSPR PAWA PEEP PESA PISI PUSA RBNU REDH
RUDU RUTU RWBL SAGU SATE SCAU SEPL
SESA SOSP POJA RBGU SPSA TRES UCAT ULSB
UNBI UNEI UNFR UNPE UNLG UNME UNST
BANS WFSP WHIM GLGU GOME GREG MODO WILL
WIPH WODU YCNH YRWA UCRT BLKI BCPE
BOGU BRNO CANG AWPE

species AMOY

is linked to 72 from 204 species , named:

COLO DOVE GBBG AMGO AMKE AMRO BBPL BHCO
BHGU GRSH ROST BRBO CHSW COME DEJU
DUNL EUST GBHE SBDO GRYE HADU HOME LESA
LEYE NOPI ICGU LAGU MALL OSPR PAWA
PEEP PESA PISI RBNU REDH RUDU RUTU RWBL
SAGU SATE SCAU SEPL SESA SOSP POJA
RBGU TRES UCAT UNBI UNEI UNFR UNPE UNLG
UNME UNST BANS WFSP WHIM GLGU GOME
GREG MODO WIPH WODU YCNH YRWA BLKI BCPE
BOGU BRNO CANG AWPE

species AMPI

is linked to 0 from 204 species

species AMRE

is linked to 0 from 204 species

species AMRO

is linked to 79 from 204 species , named:

COLO DOVE GBBG AMGO AMKE AMOY BBPL BHCO
BHGU GRSH ROST BRBO CHSW COME DEJU
DUNL EUST GADW GRHE GBHE SBDO GRYE HADU
HOME LESA LEYE NOPI ICGU LAGU MALL
OSPR PAWA PEEP PESA PISI PUSA RBNU REDH
RUDU RUTU RWBL SAGU SATE SCAU SEPL
SESA SOSP POJA RBGU SPSA TRES UCAT ULSB
UNBI UNEI UNFR UNPE UNLG UNME UNST
BANS WFSP WHIM GLGU GOME GREG MODO WILL
WIPH WODU YCNH YRWA UCRT BLKI BCPE
BOGU BRNO CANG AWPE

species BAOR

is linked to 0 from 204 species

species BARS

is linked to 12 from 204 species , named:

COMU ARTE LBBG GRSK HOGR LETE SOTE SHOR
UNJA TBMU UNGR UNSK

species BBPL

is linked to 79 from 204 species , named:

COLO DOVE GBBG AMGO AMKE AMOY AMRO BHCO

BHGU GRSH ROST BRBO CHSW COME DEJU
DUNL EUST GADW GRHE GBHE SBDO GRYE HADU
HOME LESA LEYE NOPI ICGU LAGU MALL
OSPR PAWA PEEP PESA PISI PUSA RBNU REDH
RUDU RUTU RWBL SAGU SATE SCAU SEPL
SESA SOSP POJA RBGU SPSA TRES UCAT ULSB
UNBI UNEI UNFR UNPE UNLG UNME UNST
BANS WFSP WHIM GLGU GOME GREG MODO WILL
WIPH WODU YCNH YRWA UCRT BLKI BCPE
BOGU BRNO CANG AWPE

species BHCO

is linked to 79 from 204 species , named:
COLO GBBG AMGO AMKE AMOY AMRO BBPL BHGU
ROST BRBO CHSW COME DEJU DUNL EUST
GADW GRHE GBHE SBDO GRYE HADU HOME LESA
LEYE LIGU NOPI ICGU LAGU MALL OSPR
PAWA PEEP PESA PISI PUSA RBNU REDH RUDU
RUTU RWBL SAGU SATE SCAU SEPL SESA
SOSP POJA RBGU SPSA TRES UCAT ULSB UNBI
UNEI UNFR UNPE UNLG UNME UNST BANS
MYWA WFSP WHIM GLGU GOME GREG MODO WILL
WIPH WODU YCNH YRWA UCRT BLKI BCPE
BOGU BRNO CANG AWPE

species BHGU

is linked to 78 from 204 species , named:

COLO GBBG AMGO AMKE AMOY AMRO BBPL BHCO
ROST BRBO CHSW COME DEJU DUNL EUST
GADW GRHE GBHE SBDO GRYE HADU HOME LESA
LEYE LIGU NOPI ICGU LAGU MALL OSPR
PAWA PEEP PESA PISI PUSA RBNU REDH RUDU
RUTU RWBL SAGU SATE SCAU SEPL SESA
SOSP POJA RBGU SPSA TRES UCAT ULSB UNBI
UNEI UNFR UNPE UNME UNST BANS MYWA
WFSP WHIM GLGU GOME GREG MODO WILL WIPH
WODU YCNH YRWA UCRT BLKI BCPE BOGU
BRNO CANG AWPE

species ARTE
is linked to 10 from 204 species
COMU BARS UNCO LETE SHOR UNDD
SPSK UNGR BLGU PAJA

species GRCO
is linked to 22 from 204 species , named:
ABDU CATE COME DEJU GBHE LESA LIGU MAFR
HEPE LTJA OSPR PUMA Rngr SAND TRES
WTIR UNWA MYWA WFSP GLGU BRTE BLTE

species GRSH
is linked to 48 from 204 species , named:
BLSC COLO DCCO DOVE GBBG LTDU NOGA AMGO
AMKE AMOY AMRO BBPL RAZO RNPH UNCO

BRBO CHSW EUST FOTE SBDO GRYE HADU HOME
LEYE NOPI LAGU PAWA PESA PISI RBNU
RUDU RUTU SAGU SATE SOSH UCAT UNBI UNDD
UNFR UNLT UNLG GREG UNSP WIPH YCNH
BRSP BRNO COGO

species RAZO
is linked to 13 from 204 species , named:
BLSC COLO COSH DCCO GBBG LTDU NOGA GRSH
SOSH UNLT WWSC UNTE WISP

species RNPH
is linked to 27 from 204 species , named:
COLO DCCO DOVE GBBG NOGA GRSH ROST UNCO FOTE
LAGU SCAU POJA RBGU SOSH UNBI
UNDD UNLT UNLG UNME UNST UNSP BRSP BLKI BCPE
BOGU COGO DASC

species RTLO
is linked to 4 from 204 species , named:
COSH WWSC UNTE WISP

species REPH
is linked to 15 from 204 species , named:
ROST LESP MASH SCAU POJA RBME UBBG UNLA UNME
UNSG UNST AUSH ATPU BRPE BCPE

species ROST

is linked to 62 from 204 species , named:

DOVE AMGO AMKE AMOY AMRO BBPL BHCO BHGU RNPH
REPH BRBO CHSW DUNL EUST FOTE
SBDO GRYE HADU HOME LEYE NOPI MALL MASH PAWA
PEEP PESA PISI RBNU REDH RUDU
RUTU SAGU SATE SCAU POJA RBME RBGU UBBG UCAT
UNBI UNFR UNPE UNLA UNLG UNME
UNST BANS WHIM GREG MODO UNSP WIPH WODU YCNH
YRWA BRSP BLKI BCPE BOGU BRNO
COGO DASC

species UNCO

is linked to 19 from 204 species , named:

COLO COMU DOVE GBBG LTDU ARTE GRSH RNPH
LAGU LETE SCAU SOSH UNDD UNLT SPSK
UNSP BLGU PAJA BRSP

species UNSC

is linked to 3 from 204 species , named:

UNGU UNLO COEI

species BRBO

is linked to 79 from 204 species , named:

COLO DOVE GBBG AMGO AMKE AMOY AMRO BBPL
BHCO BHGU GRSH ROST CHSW COME DEJU
DUNL EUST GADW GRHE GBHE SBDO GRYE HADU

HOME LESA LEYE NOPI ICGU LAGU MALL
OSPR PAWA PEEP PESA PISI PUSA RBNU REDH
RUDU RUTU RWBL SAGU SATE SCAU SEPL
SESA SOSP POJA RBGU SPSA TRES UCAT ULSB
UNBI UNEI UNFR UNPE UNLG UNME UNST
BANS WFSP WHIM GLGU GOME GREG MODO WILL
WIPH WODU YCNH YRWA UCRT BLKI BCPE
BOGU BRNO CANG AWPE

species CATE

is linked to 24 from 204 species , named:

ABDU GRCO COME DEJU GBHE LESA LIGU MAFR
HEPE LTJA OSPR PUMA RNGR SAND SESA
TRES WTIR UNWA MYWA WFSP GLGU GOME BRTE BLTE

species CEDW

is linked to 5 from 204 species , named:

GBTE SNGO UNEG UNSA UNFI

species CHSW

is linked to 79 from 204 species , named:

COLO DOVE GBBG AMGO AMKE AMOY AMRO BBPL
BHCO BHGU GRSH ROST BRBO COME DEJU
DUNL EUST GADW GRHE GBHE SBDO GRYE HADU
HOME LESA LEYE NOPI ICGU LAGU MALL
OSPR PAWA PEEP PESA PISI PUSA RBNU REDH
RUDU RUTU RWBL SAGU SATE SCAU SEPL

SESA SOSP POJA RBGU SPSA TRES UCAT ULSB
UNBI UNEI UNFR UNPE UNLG UNME UNST
BANS WFSP WHIM GLGU GOME GREG MODO WILL
WIPH WODU YCNH YRWA UCRT BLKI BCPE
BOGU BRNO CANG AWPE

species COME
is linked to 72 from 204 species , named:
AMGO AMKE AMOY AMRO BBPL BHCO BHGU GRCO
BRBO CATE CHSW DEJU DUNL EUST GADW
GRHE GBHE SBDO GRYE HADU HOME LESA LEYE
LIGU NOPI ICGU LTJA MALL OSPR PAWA
PEEP PESA PISI PUMA PUSA RBNU REDH RUDU
RUTU RWBL SAGU SAND SATE SEPL SESA
SOSP SPSA TRES UCAT ULSB UNEI UNFR UNPE
BANS UNWA MYWA WFSP WHIM GLGU GOME
GREG MODO WILL WIPH WODU YCNH YRWA UCRT
BLTE BRNO CANG AWPE

species COYE
is linked to 0 from 204 species

species DEJU
is linked to 74 from 204 species , named:
AMGO AMKE AMOY AMRO BBPL BHCO BHGU GRCO
BRBO CATE CHSW COME DUNL EUST GADW
GRHE GBHE SBDO GRYE HADU HOME LESA LEYE

LIGU MAFR NOPI ICGU LTJA MALL OSPR
PAWA PEEP PESA PISI PUMA PUSA RBNU REDH
RUDU RUTU RWBL SAGU SAND SATE SEPL
SESA SOSP SPSA TRES UCAT ULSB UNEI UNFR
UNPE BANS UNWA MYWA WFSP WHIM GLGU
GOME GREG MODO BRTE WILL WIPH WODU YCNH
YRWA UCRT BLTE BRNO CANG AWPE

species DUNL

is linked to 78 from 204 species , named:

COLO GBBG AMGO AMKE AMOY AMRO BBPL BHCO
BHGU ROST BRBO CHSW COME DEJU EUST
GADW GRHE GBHE SBDO GRYE HADU HOME LESA
LEYE LIGU NOPI ICGU LAGU MALL OSPR
PAWA PEEP PESA PISI PUSA RBNU REDH RUDU
RUTU RWBL SAGU SATE SCAU SEPL SESA
SOSP POJA RBGU SPSA TRES UCAT ULSB UNBI
UNEI UNFR UNPE UNME UNST BANS MYWA
WFSP WHIM GLGU GOME GREG MODO WILL WIPH
WODU YCNH YRWA UCRT BLKI BCPE BOGU
BRNO CANG AWPE

species EUST

is linked to 79 from 204 species , named:

COLO DOVE GBBG AMGO AMKE AMOY AMRO BBPL
BHCO BHGU GRSH ROST BRBO CHSW COME
DEJU DUNL GADW GRHE GBHE SBDO GRYE HADU

HOME LESA LEYE NOPI ICGU LAGU MALL
OSPR PAWA PEEP PESA PISI PUSA RBNU REDH
RUDU RUTU RWBL SAGU SATE SCAU SEPL
SESA SOSP POJA RBGU SPSA TRES UCAT ULSB
UNBI UNEI UNFR UNPE UNLG UNME UNST
BANS WFSP WHIM GLGU GOME GREG MODO WILL
WIPH WODU YCNH YRWA UCRT BLKI BCPE
BOGU BRNO CANG AWPE

species FEPE
is linked to 0 from 204 species

species FOTE
is linked to 24 from 204 species , named:
COLO DCCO DOVE GBBG NOGA GRSH RNPH ROST
LAGU SCAU POJA RBGU SOSH UNBI UNLT
UNLG UNME UNST UNSP BRSP BCPE BOGU COGO
DASC

species GADW
is linked to 59 from 204 species , named:
AMKE AMRO BBPL BHCO BHGU BRBO CHSW COME
DEJU DUNL EUST GRHE GBHE SBDO GRYE
HADU HOME LESA LEYE LIGU NOPI MALL OSPR
PAWA PESA PISI PUSA RBNU REDH RUDU
RUTU RWBL SAGU SATE SEPL SESA SOSP SPSA
TRES ULSB UNEI UNFR UNPE BANS MYWA

WFSP WHIM GLGU GOME GREG MODO WILL WIPH
WODU YCNH YRWA UCRT BRNO AWPE

species GBTE
is linked to 5 from 204 species , named:
CEDW SNGO UNEG UNSA UNFI

species GCKI
is linked to 0 from 204 species

species GRCA
is linked to 0 from 204 species

species GRHE
is linked to 59 from 204 species , named:
AMKE AMRO BBPL BHCO BHGU BRBO CHSW COME
DEJU DUNL EUST GADW GBHE SBDO GRYE
HADU HOME LESA LEYE LIGU NOPI MALL OSPR
PAWA PESA PISI PUSA RBNU REDH RUDU
RUTU RWBL SAGU SATE SEPL SESA SOSP SPSA
TRES ULSB UNEI UNFR UNPE BANS MYWA
WFSP WHIM GLGU GOME GREG MODO WILL WIPH
WODU YCNH YRWA UCRT BRNO AWPE

species GRSC
is linked to 3 from 204 species , named:
GWIE UNDU USSB

species GBHE

is linked to 74 from 204 species , named:

AMGO AMKE AMOY AMRO BBPL BHCO BHGU GRCO
BRBO CATE CHSW COME DEJU DUNL EUST
GADW GRHE SBDO GRYE HADU HOME LESA LEYE
LIGU NOPI HEPE ICGU LTJA MALL OSPR
PAWA PEEP PESA PISI PUMA PUSA RBNU REDH
RUDU RUTU RWBL SAGU SAND SATE SEPL
SESA SOSP SPSA TRES UCAT ULSB UNEI UNFR
UNPE BANS UNWA MYWA WFSP WHIM GLGU
GOME GREG MODO BRTE WILL WIPH WODU YCNH
YRWA UCRT BLTE BRNO CANG AWPE

species SBDO

is linked to 79 from 204 species , named:

COLO DOVE GBBG AMGO AMKE AMOY AMRO BBPL BHCO
BHGU GRSH ROST BRBO CHSW COME
DEJU DUNL EUST GADW GRHE GBHE GRYE HADU HOME
LESA LEYE NOPI ICGU LAGU MALL
OSPR PAWA PEEP PESA PISI PUSA RBNU REDH RUDU
RUTU RWBL SAGU SATE SCAU SEPL
SESA SOSP POJA RBGU SPSA TRES UCAT ULSB UNBI
UNEI UNFR UNPE UNLG UNME UNST
BANS WFSP WHIM GLGU GOME GREG MODO WILL WIPH
WODU YCNH YRWA UCRT BLKI BCPE
BOGU BRNO CANG AWPE

species GRYE

is linked to 79 from 204 species , named:

COLO DOVE GBBG AMGO AMKE AMOY AMRO BBPL BHCO
BHGU GRSH ROST BRBO CHSW COME
DEJU DUNL EUST GADW GRHE GBHE SBDO HADU HOME
LESA LEYE NOPI ICGU LAGU MALL
OSPR PAWA PEEP PESA PISI PUSA RBNU REDH RUDU
RUTU RWBL SAGU SATE SCAU SEPL
SESA SOSP POJA RBGU SPSA TRES UCAT ULSB UNBI
UNEI UNFR UNPE UNLG UNME UNST
BANS WFSP WHIM GLGU GOME GREG MODO WILL WIPH
WODU YCNH YRWA UCRT BLKI BCPE
BOGU BRNO CANG AWPE

species GWIE

is linked to 3 from 204 species , named:

GRSC UNDU USSB

species HADU

is linked to 79 from 204 species , named:

COLO DOVE GBBG AMGO AMKE AMOY AMRO BBPL BHCO
BHGU GRSH ROST BRBO CHSW COME
DEJU DUNL EUST GADW GRHE GBHE SBDO GRYE HOME
LESA LEYE NOPI ICGU LAGU MALL
OSPR PAWA PEEP PESA PISI PUSA RBNU REDH RUDU
RUTU RWBL SAGU SATE SCAU SEPL

SESA SOSP POJA RBGU SPSA TRES UCAT ULSB UNBI
UNEI UNFR UNPE UNLG UNME UNST
BANS WFSP WHIM GLGU GOME GREG MODO WILL WIPH
WODU YCNH YRWA UCRT BLKI BCPE
BOGU BRNO CANG AWPE

species HOME
is linked to 79 from 204 species , named:
COLO DOVE GBBG AMGO AMKE AMOY AMRO BBPL BHCO
BHGU GRSH ROST BRBO CHSW COME
DEJU DUNL EUST GADW GRHE GBHE SBDO GRYE HADU
LESA LEYE NOPI ICGU LAGU MALL
OSPR PAWA PEEP PESA PISI PUSA RBNU REDH RUDU
RUTU RWBL SAGU SATE SCAU SEPL
SESA SOSP POJA RBGU SPSA TRES UCAT ULSB UNBI
UNEI UNFR UNPE UNLG UNME UNST
BANS WFSP WHIM GLGU GOME GREG MODO WILL WIPH
WODU YCNH YRWA UCRT BLKI BCPE
BOGU BRNO CANG AWPE

species LBBG
is linked to 8 from 204 species , named:
BARS GRSK SOTE SHOR UNJA TBMU UNGR UNSK

species LESA
is linked to 73 from 204 species , named:
AMGO AMKE AMOY AMRO BBPL BHCO BHGU GRCO BRBO

CATE CHSW COME DEJU DUNL EUST
GADW GRHE GBHE SBDO GRYE HADU HOME LEYE LIGU
NOPI ICGU LTJA MALL OSPR PAWA
PEEP PESA PISI PUMA PUSA RBNU REDH RUDU RUTU
RWBL SAGU SAND SATE SEPL SESA
SOSP SPSA TRES UCAT ULSB UNEI UNFR UNPE BANS
UNWA MYWA WFSP WHIM GLGU GOME
GREG MODO BRTE WILL WIPH WODU YCNH YRWA UCRT
BLTE BRNO CANG AWPE

species LESC
is linked to 0 from 204 species

species LEYE
is linked to 79 from 204 species , named:
COLO DOVE GBBG AMGO AMKE AMOY AMRO BBPL BHCO
BHGU GRSH ROST BRBO CHSW COME
DEJU DUNL EUST GADW GRHE GBHE SBDO GRYE HADU
HOME LESA NOPI ICGU LAGU MALL
OSPR PAWA PEEP PESA PISI PUSA RBNU REDH RUDU
RUTU RWBL SAGU SATE SCAU SEPL
SESA SOSP POJA RBGU SPSA TRES UCAT ULSB UNBI
UNEI UNFR UNPE UNLG UNME UNST
BANS WFSP WHIM GLGU GOME GREG MODO WILL WIPH
WODU YCNH YRWA UCRT BLKI BCPE
BOGU BRNO CANG AWPE

species LIGU

is linked to 48 from 204 species , named:

ABDU BHCO BHGU GRCO CATE COME DEJU DUNL GADW
GRHE GBHE LESA HEPE ICGU LTJA
MALL OSPL PEEP PUMA PUSA REDH RWBL SAND SEPL
SESA SOSP SPSA TRES ULSB UNEI
UNPE WTIR BANS UNWA MYWA WFSP WHIM GLGU GOME
MODO BRTE WILL WODU YRWA UCRT
BLTE CANG AWPE

species LISH

is linked to 0 from 204 species

species MABO

is linked to 0 from 204 species

species MAFR

is linked to 8 from 204 species , named:

GRCO CATE DEJU PUMA SAND GLGU BRTE BLTE

species MAWA

is linked to 0 from 204 species

species NOFL

is linked to 0 from 204 species

species NOHA

is linked to 0 from 204 species

species NOPI

is linked to 79 from 204 species , named:

COLO DOVE GBBG AMGO AMKE AMOY AMRO BBPL
BHCO BHGU GRSH ROST BRBO CHSW COME
DEJU DUNL EUST GADW GRHE GBHE SBDO GRYE
HADU HOME LESA LEYE ICGU LAGU MALL
OSPR PAWA PEEP PESA PISI PUSA RBNU REDH
RUDU RUTU RWBL SAGU SATE SCAU SEPL
SESA SOSP POJA RBGU SPSA TRES UCAT ULSB
UNBI UNEI UNFR UNPE UNLG UNME UNST
BANS WFSP WHIM GLGU GOME GREG MODO WILL
WIPH WODU YCNH YRWA UCRT BLKI BCPE
BOGU BRNO CANG AWPE

species NOTE

is linked to 0 from 204 species

species GRSK

is linked to 10 from 204 species

COMU BARS LBBG HOGR SOTE SHOR UNJA SPSK
UNGR BRSP

species HEPE

is linked to 16 from 204 species , named:

ABDU GRCO CATE GBHE LIGU LTJA PUMA RNGR

SAND TRES SWAL WTIR UNWA MYWA BRTE

BLTE

species HOGR

is linked to 9 from 204 species , named:

COMU BARS GRSK SOTE SHOR UNDD SPSK UNGR BCPE

species ICGU

is linked to 58 from 204 species , named:

AMGO AMKE AMOY AMRO BBPL BHCO BHGU BRBO

CHSW COME DEJU DUNL EUST GBHE SBDO

GRYE HADU HOME LESA LEYE LIGU NOPI MALL

OSPR PAWA PEEP PESA PISI RBNU REDH

RUDU RUTU RWBL SAGU SATE SEPL SESA SOSP

TRES UCAT UNEI UNFR UNPE BANS MYWA

WFSP WHIM GLGU GOME GREG MODO WIPH WODU

YCNH YRWA BRNO CANG AWPE

species LAGU

is linked to 64 from 204 species , named:

BLSC COLO DCCO DOVE GBBG LTDU NOGA AMGO

AMKE AMOY AMRO BBPL BHCO BHGU GRSH

RNPH UNCO BRBO CHSW DUNL EUST FOTE SBDO

GRYE HADU HOME LEYE NOPI MALL PAWA

PEEP PESA PISI RBNU REDH RUDU RUTU SAGU

SATE SOSP SOSH UCAT UNBI UNDD UNEI

UNFR UNLT UNPE UNLG BANS WHIM GREG MODO

UNSP WIPH WODU YCNH YRWA BRSP BCPE
BRNO CANG COGO DASC

species LESP
is linked to 10 from 204 species
NOFU REPH MASH RBME RBGU UBBG UNLA BLKI
BOGU COTE

species LETE
is linked to 10 from 204 species
COMU BARS ARTE UNCO SHOR UNDD SPSK UNGR
BLGU PAJA

species LTJA
is linked to 23 from 204 species , named:
ABDU GRCO CATE COME DEJU GBHE LESA LIGU
HEPE OSPR PUMA Rngr SAND SESA TRES
WTIR UNWA MYWA WFSP GLGU GOME BRTE BLTE

species MALL
is linked to 80 from 204 species
COLO DOVE GBBG AMGO AMKE AMOY AMRO BBPL
BHO BHGU ROST BRBO CHSW COME DEJU
DUNL EUST GADW GRHE GBHE SBDO GRYE HADU
HOME LESA LEYE LIGU NOPI ICGU LAGU
OSPR PAWA PEEP PESA PISI PUSA RBNU REDH
RUDU RUTU RWBL SAGU SATE SCAU SEPL

SESA SOSP POJA RBGU SPSA TRES UCAT ULSB
UNBI UNEI UNFR UNPE UNLG UNME UNST
BANS MYWA WFSP WHIM GLGU GOME GREG MODO
WILL WIPH WODU YCNH YRWA UCRT BLKI
BCPE BOGU BRNO CANG AWPE

species MASH
is linked to 16 from 204 species , named:
REPH ROST LESP SCAU POJA RBME UBBG UNLA
UNME UNSG UNST AUSH ATPU BRPE BCPE
DASC

species NOWA
is linked to 0 from 204 species

species OSPR
is linked to 73 from 204 species , named:
AMGO AMKE AMOY AMRO BBPL BHCO BHGU GRCO
BRBO CATE CHSW COME DEJU DUNL EUST
GADW GRHE GBHE SBDO GRYE HADU HOME LESA
LEYE LIGU NOPI ICGU LTJA MALL PAWA
PEEP PESA PISI PUMA PUSA RBNU REDH RUDU
RUTU RWBL SAGU SAND SATE SEPL SESA
SOSP SPSA TRES UCAT ULSB UNEI UNFR UNPE
BANS UNWA MYWA WFSP WHIM GLGU GOME
GREG MODO BRTE WILL WIPH WODU YCNH YRWA
UCRT BLTE BRNO CANG AWPE

species PAWA

is linked to 79 from 204 species , named:

COLO DOVE GBBG AMGO AMKE AMOY AMRO BBPL
BHCO BHGU GRSH ROST BRBO CHSW COME
DEJU DUNL EUST GADW GRHE GBHE SBDO GRYE
HADU HOME LESA LEYE NOPI ICGU LAGU
MALL OSPR PEEP PESA PISI PUSA RBNU REDH
RUDU RUTU RWBL SAGU SATE SCAU SEPL
SESA SOSP POJA RBGU SPSA TRES UCAT ULSB
UNBI UNEI UNFR UNPE UNLG UNME UNST
BANS WFSP WHIM GLGU GOME GREG MODO WILL
WIPH WODU YCNH YRWA UCRT BLKI BCPE
BOGU BRNO CANG AWPE

species PEEP

is linked to 69 from 204 species , named:

COLO GBBG AMGO AMKE AMOY AMRO BBPL BHCO
BHGU ROST BRBO CHSW COME DEJU DUNL
EUST GBHE SBDO GRYE HADU HOME LESA LEYE
LIGU NOPI ICGU LAGU MALL OSPR PAWA
PESA PISI RBNU REDH RUDU RUTU RWBL SAGU
SATE SCAU SEPL SESA SOSP POJA RBGU
TRES UCAT UNBI UNEI UNFR UNPE UNME BANS
MYWA WFSP WHIM GLGU GOME GREG MODO
WIPH WODU YCNH YRWA BLKI BOGU BRNO CANG
AWPE

species PEFA
is linked to 0 from 204 species

species PESA
is linked to 79 from 204 species , named:
COLO DOVE GBBG AMGO AMKE AMOY AMRO BBPL
BHCO BHGU GRSH ROST BRBO CHSW COME
DEJU DUNL EUST GADW GRHE GBHE SBDO GRYE
HADU HOME LESA LEYE NOPI ICCGU LAGU
MALL OSRP PAWA PEEP PISI PUSA RBNU REDH
RUDU RUTU RWBL SAGU SATE SCAU SEPL
SESA SOSP POJA RBGU SPSA TRES UCAT ULSB
UNBI UNEI UNFR UNPE UNLG UNME UNST
BANS WFSP WHIM GLGU GOME GREG MODO WILL
WIPH WODU YCNH YRWA UCRT BLKI BCPE
BOGU BRNO CANG AWPE

species PISI
is linked to 79 from 204 species , named:
COLO DOVE GBBG AMGO AMKE AMOY AMRO BBPL
BHCO BHGU GRSH ROST BRBO CHSW COME
DEJU DUNL EUST GADW GRHE GBHE SBDO GRYE
HADU HOME LESA LEYE NOPI ICCGU LAGU
MALL OSRP PAWA PEEP PESA PUSA RBNU REDH
RUDU RUTU RWBL SAGU SATE SCAU SEPL
SESA SOSP POJA RBGU SPSA TRES UCAT ULSB

UNBI UNEI UNFR UNPE UNLG UNME UNST
BANS WFSP WHIM GLGU GOME GREG MODO WILL
WIPH WODU YCNH YRWA UCRT BLKI BCPE
BOGU BRNO CANG AWPE

species PUMA
is linked to 22 from 204 species , named:
ABDU GRCO CATE COME DEJU GBHE LESA LIGU
MAFR HEPE LTJA OSPR Rngr SAND TRES
WTIR UNWA MYWA WFSP GLGU BRTE BLTE

species PUSA
is linked to 59 from 204 species , named:
AMKE AMRO BBPL BHCO BHGU BRBO CHSW COME
DEJU DUNL EUST GADW GRHE GBHE SBDO
GRYE HADU HOME LESA LEYE LIGU NOPI MALL
OSPR PAWA PESA PISI RBNU REDH RUDU
RUTU RWBL SAGU SATE SEPL SESA SOSP SPSA
TRES ULSB UNEI UNFR UNPE BANS MYWA
WFSP WHIM GLGU GOME GREG MODO WILL WIPH
WODU YCNH YRWA UCRT BRNO AWPE

species RBNU
is linked to 79 from 204 species , named:
COLO DOVE GBBG AMGO AMKE AMOY AMRO BBPL
BHCO BHGU GRSH ROST BRBO CHSW COME
DEJU DUNL EUST GADW GRHE GBHE SBDO GRYE

HADU HOME LESA LEYE NOPI ICGU LAGU
MALL OSRP PAWA PEEP PESA PISI PUSA REDH
RUDU RUTU RWBL SAGU SATE SCAU SEPL
SESA SOSP POJA RBGU SPSA TRES UCAT ULSB
UNBI UNEI UNFR UNPE UNLG UNME UNST
BANS WFSP WHIM GLGU GOME GREG MODO WILL WIPH
WODU YCNH YRWA UCRT BLKI BCPE
BOGU BRNO CANG AWPE

species RBTR
is linked to 0 from 204 species

species RCKI
is linked to 0 from 204 species

species REDH
is linked to 78 from 204 species , named:
COLO GBBG AMGO AMKE AMOY AMRO BBPL BHOO
BHGU ROST BRBO CHSW COME DEJU DUNL
EUST GADW GRHE GBHE SBDO GRYE HADU HOME
LESA LEYE LIGU NOPI ICGU LAGU MALL
OSPR PAWA PEEP PESA PISI PUSA RBNU RUDU
RUTU RWBL SAGU SATE SCAU SEPL SESA
SOSP POJA RBGU SPSA TRES UCAT ULSB UNBI
UNEI UNFR UNPE UNME UNST BANS MYWA
WFSP WHIM GLGU GOME GREG MODO WILL WIPH
WODU YCNH YRWA UCRT BLKI BCPE BOGU

BRNO CANG AWPE

species Rngr

is linked to 11 from 204 species , named:

ABDU GRCO CATE HEPE LTJA PUMA SAND WTIR
UNWA BRTE BLTE

species Rudu

is linked to 79 from 204 species , named:

COLO DOVE GBBG AMGO AMKE AMOY AMRO BBPL
BHCO BHGU GRSH ROST BRBO CHSW COME
DEJU DUNL EUST GADW GRHE GBHE SBDO GRYE
HADU HOME LESA LEYE NOPI ICCGU LAGU
MALL OSPP PAWA PEEP PESA PISI PUSA RBNU
REDH RUTU RWBL SAGU SATE SCAU SEPL
SESA SOSP POJA RBGU SPSA TRES UCAT ULSB
UNBI UNEI UNFR UNPE UNLG UNME UNST
BANS WFSP WHIM GLGU GOME GREG MODO WILL
WIPH WODU YCNH YRWA UCRT BLKI BCPE
BOGU BRNO CANG AWPE

species Rutu

is linked to 79 from 204 species , named:

COLO DOVE GBBG AMGO AMKE AMOY AMRO BBPL
BHCO BHGU GRSH ROST BRBO CHSW COME
DEJU DUNL EUST GADW GRHE GBHE SBDO GRYE
HADU HOME LESA LEYE NOPI ICCGU LAGU

MALL OSPR PAWA PEEP PESA PISI PUSA RBNU
REDH RUDU RWBL SAGU SATE SCAU SEPL
SESA SOSP POJA RBGU SPSA TRES UCAT ULSB
UNBI UNEI UNFR UNPE UNLG UNME UNST
BANS WFSP WHIM GLGU GOME GREG MODO WILL
WIPH WODU YCNH YRWA UCRT BLKI BCPE
BOGU BRNO CANG AWPE

species RWBL
is linked to 70 from 204 species
AMGO AMKE AMOY AMRO BBPL BHCO BHGU BRBO
CHSW COME DEJU DUNL EUST GADW GRHE
GBHE SBDO GRYE HADU HOME LESA LEYE LIGU
NOPI ICCGU MALL OSPR PAWA PEEP PESA
PISI PUSA RBNU REDH RUDU RUTU SAGU SATE
SCAU SEPL SESA SOSP RBGU SPSA TRES
UCAT ULSB UNEI UNFR UNPE UNST BANS MYWA
WFSP WHIM GLGU GOME GREG MODO WILL
WIPH WODU YCNH YRWA UCRT BLKI BOGU BRNO
CANG AWPE

species SAGU
is linked to 79 from 204 species , named:
COLO DOVE GBBG AMGO AMKE AMOY AMRO BBPL
BHCO BHGU GRSH ROST BRBO CHSW COME
DEJU DUNL EUST GADW GRHE GBHE SBDO GRYE
HADU HOME LESA LEYE NOPI ICCGU LAGU

MALL OSPP PAWA PEEP PESA PISI PUSA RBNU
REDH RUDU RUTU RWBL SATE SCAU SEPL
SESA SOSP POJA RBGU SPSA TRES UCAT ULSB
UNBI UNEI UNFR UNPE UNLG UNME UNST
BANS WFSP WHIM GLGU GOME GREG MODO WILL
WIPH WODU YCNH YRWA UCRT BLKI BCPE
BOGU BRNO CANG AWPE

species SAND

is linked to 22 from 204 species , named:

ABDU GRCO CATE COME DEJU GBHE LESA LIGU
MAFR HEPE LTJA OSPP PUMA Rngr TRES
WTIR UNWA MYWA WFSP GLGU BRTE BLTE

species SATE

is linked to 79 from 204 species , named:

COLO DOVE GBBG AMGO AMKE AMOY AMRO BBPL
BHCO BHGU GRSH ROST BRBO CHSW COME
DEJU DUNL EUST GADW GRHE GBHE SBDO GRYE
HADU HOME LESA LEYE NOPI ICCU LAGU
MALL OSPP PAWA PEEP PESA PISI PUSA RBNU
REDH RUDU RUTU RWBL SAGU SCAU SEPL
SESA SOSP POJA RBGU SPSA TRES UCAT ULSB
UNBI UNEI UNFR UNPE UNLG UNME UNST
BANS WFSP WHIM GLGU GOME GREG MODO WILL
WIPH WODU YCNH YRWA UCRT BLKI BCPE
BOGU BRNO CANG AWPE

species SAVS
is linked to 0 from 204 species

species SCAU
is linked to 63 from 204 species , named:
AMGO AMKE AMOY AMRO BBPL BHCO BHGU RNPH
REPH ROST UNCO BRBO CHSW DUNL EUST
FOTE SBDO GRYE HADU HOME LEYE NOPI MALL
MASH PAWA PEEP PESA PISI RBNU REDH
RUDU RUTU RWBL SAGU SATE SEPL SOSP POJA
RBME UBBG UCAT UNDD UNEI UNFR UNPE
UNLA UNME UNST BANS WHIM GREG MODO WIPH
WODU YCNH YRWA BRSP BCPE BRNO CANG
COGO DASC AWPE

species SEPL
is linked to 70 from 204 species
AMGO AMKE AMOY AMRO BBPL BHCO BHGU BRBO
CHSW COME DEJU DUNL EUST GADW GRHE
GBHE SBDO GRYE HADU HOME LESA LEYE LIGU
NOPI ICGU MALL OSPR PAWA PEEP PESA
PISI PUSA RBNU REDH RUDU RUTU RWBL SAGU
SATE SCAU SESA SOSP RBGU SPSA TRES
UCAT ULSB UNEI UNFR UNPE UNST BANS MYWA
WFSP WHIM GLGU GOME GREG MODO WILL
WIPH WODU YCNH YRWA UCRT BLKI BOGU BRNO

CANG AWPE

species SESA

is linked to 69 from 204 species , named:

AMGO AMKE AMOY AMRO BBPL BHCO BHGU BRBO
CATE CHSW COME DEJU DUNL EUST GADW
GRHE GBHE SBDO GRYE HADU HOME LESA LEYE
LIGU NOPI ICGU LTJA MALL OSPR PAWA
PEEP PESA PISI PUSA RBNU REDH RUDU RUTU
RWBL SAGU SATE SEPL SOSP SPSA TRES
UCAT ULSB UNEI UNFR UNPE BANS UNWA MYWA
WFSP WHIM GLGU GOME GREG MODO WILL
WIPH WODU YCNH YRWA UCRT BLTE BRNO CANG AWPE

species SNBU

is linked to 0 from 204 species

species SNGO

is linked to 5 from 204 species , named:

CEDW GBTE UNEG UNSA UNFI

species SOSP

is linked to 75 from 204 species , named:

GBBG AMGO AMKE AMOY AMRO BBPL BHCO BHGU
BRBO CHSW COME DEJU DUNL EUST GADW
GRHE GBHE SBDO GRYE HADU HOME LESA LEYE
LIGU NOPI ICGU LAGU MALL OSPR PAWA

PEEP PESA PISI PUSA RBNU REDH RUDU RUTU
RWBL SAGU SATE SCAU SEPL SESA POJA
RBGU SPSA TRES UCAT ULSB UNBI UNEI UNFR
UNPE UNME UNST BANS MYWA WFSP WHIM
GLGU GOME GREG MODO WILL WIPH WODU YCNH
YRWA UCRT BLKI BOGU BRNO CANG AWPE

species POJA

is linked to 64 from 204 species , named:

DOVE AMGO AMKE AMOY AMRO BBPL BHCO BHGU RNPH
REPH ROST BRBO CHSW DUNL EUST
FOTE SBDO GRYE HADU HOME LEYE NOPI MALL MASH
PAWA PEEP PESA PISI RBNU REDH
RUDU RUTU SAGU SATE SCAU SOSP RBME RBGU UBBG
UCAT UNBI UNEI UNFR UNPE UNLA
UNLG UNME UNST BANS WHIM GREG MODO UNSP WIPH
WODU YCNH YRWA BRSP BLKI BCPE
BOGU BRNO COGO DASC

species RBME

is linked to 15 from 204 species , named:

REPH ROST LESP MASH SCAU POJA UBBG UNLA UNME
UNSG UNST AUSH ATPU BRPE BCPE

species RBGU

is linked to 63 from 204 species , named:

DOVE AMGO AMKE AMOY AMRO BBPL BHCO BHGU RNPH

ROST BRBO CHSW DUNL EUST FOTE
SBDO GRYE HADU HOME LEYE NOPI LESP MALL PAWA
PEEP PESA PISI RBNU REDH RUDU
RUTU RWBL SAGU SATE SEPL SOSP POJA UCAT UNBI
UNEI UNFR UNPE UNLG UNME UNST
BANS WHIM GREG MODO UNSP WIPH WODU YCNH YRWA
BRSP BLKI BCPE BOGU BRNO CANG
COGO DASC AWPE

species ROYT
is linked to 6 from 204 species , named:
UNAL UNSG ATPU BRPE UNPH UNSH

species SOSH
is linked to 22 from 204 species , named:
BLSC COLO DCCO DOVE GBBG LTDU NOGA GRSH RAZO
RNPH UNCO FOTE LAGU UNBI UNDD
UNLT UNLG UNSP BRSP BCPE COGO DASC

species SOTE
is linked to 9 from 204 species , named:
COMU BARS LBBG GRSK HOGR SHOR SPSK UNGR DASC

species SHOR
is linked to 11 from 204 species , named:
BARS ARTE LBBG GRSK HOGR LETE SOTE UNJA TBMU
UNGK UNSK

species SPSA

is linked to 59 from 204 species , named:

AMKE AMRO BBPL BHCO BHGU BRBO CHSW COME DEJU
DUNL EUST GADW GRHE GBHE SBDO
GRYE HADU HOME LESA LEYE LIGU NOPI MALL OSPR
PAWA PESA PISI PUSA RBNU REDH
RUDU RUTU RWBL SAGU SATE SEPL SESA SOSP TRES
ULSB UNEI UNFR UNPE BANS MYWA
WFSP WHIM GLGU GOME GREG MODO WILL WIPH WODU
YCNH YRWA UCRT BRNO AWPE

species TRES

is linked to 76 from 204 species , named:

ABDU AMGO AMKE AMOY AMRO BBPL BHCO BHGU GRCO
BRBO CATE CHSW COME DEJU DUNL
EUST GADW GRHE GBHE SBDO GRYE HADU HOME LESA
LEYE LIGU NOPI HEPE ICGU LTJA
MALL OSPR PAWA PEEP PESA PISI PUMA PUSA RBNU
REDH RUDU RUTU RWBL SAGU SAND
SATE SEPL SESA SOSP SPSA UCAT ULSB UNEI UNFR
UNPE WTIR BANS UNWA MYWA WFSP
WHIM GLGU GOME GREG MODO BRTE WILL WIPH WODU
YCNH YRWA UCRT BLTE BRNO CANG
AWPE

species UBBG

is linked to 15 from 204 species , named:

REPH ROST LESP MASH SCAU POJA RBME UNLA UNME
UNSG UNST AUSH ATPU BRPE BCPE

species UCAT

is linked to 72 from 204 species , named:

COLO DOVE GBBG AMGO AMKE AMOY AMRO BBPL BHCO
BHGU GRSH ROST BRBO CHSW COME
DEJU DUNL EUST GBHE SBDO GRYE HADU HOME LESA
LEYE NOPI ICGU LAGU MALL OSPR
PAWA PEEP PESA PISI RBNU REDH RUDU RUTU RWBL
SAGU SATE SCAU SEPL SESA SOSP
POJA RBGU TRES UNBI UNEI UNFR UNPE UNLG UNME
UNST BANS WFSP WHIM GLGU GOME
GREG MODO WIPH WODU YCNH YRWA BLKI BCPE BOGU
BRNO CANG AWPE

species ULSB

is linked to 59 from 204 species , named:

AMKE AMRO BBPL BHCO BHGU BRBO CHSW COME DEJU
DUNL EUST GADW GRHE GBHE SBDO
GRYE HADU HOME LESA LEYE LIGU NOPI MALL OSPR
PAWA PESA PISI PUSA RBNU REDH
RUDU RUTU RWBL SAGU SATE SEPL SESA SOSP SPSA
TRES UNEI UNFR UNPE BANS MYWA
WFSP WHIM GLGU GOME GREG MODO WILL WIPH WODU
YCNH YRWA UCRT BRNO AWPE

species UNBI

is linked to 65 from 204 species , named:

BLSC COLO DOVE GBBG LTDU AMGO AMKE AMOY AMRO
BBPL BHCO BHGU GRSH RNPH ROST
BRBO CHSW DUNL EUST FOTE SBDO GRYE HADU HOME
LEYE NOPI LAGU MALL PAWA PEEP
PESA PISI RBNU REDH RUDU RUTU SAGU SATE SOSP
POJA RBGU SOSH UCAT UNEI UNFR
UNLT UNPE UNLG UNME BANS WHIM GREG MODO UNSP
WIPH WODU YCNH YRWA BRSP BLKI
BCPE BOGU BRNO COGO DASC

species UNDD

is linked to 21 from 204 species , named:

COLO COMU GBBG LTDU NOGA ARTE GRSH RNPH UNCO
HOGR LAGU LETE SCAU SOSH UNLT
SPSK UNSP BLGU PAJA BRSP COGO

species UNEG

is linked to 5 from 204 species , named:

CEDW GBTE SNGO UNSA UNFI

species UNEI

is linked to 75 from 204 species , named:

GBBG AMGO AMKE AMOY AMRO BBPL BHCO BHGU BRBO
CHSW COME DEJU DUNL EUST GADW

GRHE GBHE SBDO GRYE HADU HOME LESA LEYE LIGU
NOPI ICGU LAGU MALL OSPR PAWA
PEEP PESA PISI PUSA RBNU REDH RUDU RUTU RWBL
SAGU SATE SCAU SEPL SESA SOSP
POJA RBGU SPSA TRES UCAT ULSB UNBI UNFR UNPE
UNME UNST BANS MYWA WFSP WHIM
GLGU GOME GREG MODO WILL WIPH WODU YCNH YRWA
UCRT BLKI BOGU BRNO CANG AWPE

species UNFR

is linked to 79 from 204 species , named:

COLO DOVE GBBG AMGO AMKE AMOY AMRO BBPL BHCO
BHGU GRSH ROST BRBO CHSW COME
DEJU DUNL EUST GADW GRHE GBHE SBDO GRYE HADU
HOME LESA LEYE NOPI ICGU LAGU
MALL OSPR PAWA PEEP PESA PISI PUSA RBNU REDH
RUDU RUTU RWBL SAGU SATE SCAU
SEPL SESA SOSP POJA RBGU SPSA TRES UCAT ULSB
UNBI UNEI UNPE UNLG UNME UNST
BANS WFSP WHIM GLGU GOME GREG MODO WILL WIPH
WODU YCNH YRWA UCRT BLKI BCPE
BOGU BRNO CANG AWPE

species UNGO

is linked to 3 from 204 species , named:

TBMU UNMU UNSK

species UNLT
is linked to 21 from 204 species , named:
BLSC COLO DCCO DOVE GBBG LTDU NOGA GRSH RAZO
RNPH UNCO FOTE LAGU SOSH UNBI
UNDD UNLG UNSP BRSP COGO DASC

species UNPA
is linked to 1/204 vertex , named:
BLGU

species UNPT
is linked to 0 from 204 species

species UNJA
is linked to 7 from 204 species , named:
BARS LBBG GRSK SHOR TBMU UNGR UNSK

species UNPE
is linked to 79 from 204 species , named:
COLO GBBG AMGO AMKE AMOY AMRO BBPL BHCO BHGU
ROST BRBO CHSW COME DEJU DUNL
EUST GAIDW GRHE GBHE SBDO GRYE HADU HOME LESA
LEYE LIGU NOPI ICGU LAGU MALL
OSPR PAWA PEEP PESA PISI PUSA RBNU REDH RUDU
RUTU RWBL SAGU SATE SCAU SEPL
SESA SOSP POJA RBGU SPSA TRES UCAT ULSB UNBI
UNEI UNFR UNLG UNME UNST BANS

MYWA WFSP WHIM GLGU GOME GREG MODO WILL WIPH
WODU YCNH YRWA UCRT BLKI BCPE
BOGU BRNO CANG AWPE

species SPAR
is linked to 0 from 204 species

species SWAL
is linked to 1/204 vertex , named:
HEPE

species SPSK
is linked to 12 from 204 species , named:
BLSC COMU LTDU ARTE UNCO GRSK HOGR LETE SOTE
UNDD BLGU PAJA

species TBMU
is linked to 8 from 204 species , named:
BARS LBBG SHOR UNGO UNJA UNGR UNMU UNSK

species UNAL
is linked to 4 from 204 species , named:
ROYT BUFF UNPH UNSH

species UNDU
is linked to 3 from 204 species , named:
GRSC GWIE USSB

species UNGR

is linked to 12 from 204 species , named:

COMU BARS ARTE LBBG GRSK HOGR LETE SOTE SHOR
UNJA TBMU UNSK

species UNGU

is linked to 3 from 204 species , named:

UNSC UNLO COEI

species UNLA

is linked to 15 from 204 species , named:

REPH ROST LESP MASH SCAU POJA RBME UBBG UNME
UNSG UNST AUSH ATPU BRPE BCPE

species UNLG

is linked to 58 from 204 species , named:

BLSC COLO DCCO DOVE GBBG LTDU AMGO AMKE AMOY
AMRO BBPL BHCO GRSH RNPH ROST
BRBO CHSW EUST FOTE SBDO GRYE HADU HOME LEYE
NOPI LAGU MALL PAWA PESA PISI
RBNU RUDU RUTU SAGU SATE POJA RBGU SOSH UCAT
UNBI UNFR UNLT UNPE UNME BANS
WHIM GREG UNSP WIPH WODU YCNH BRSP BLKI BCPE
BOGU BRNO COGO DASC

species UNLO

is linked to 3 from 204 species , named:

UNSC UNGU COEI

species UNME

is linked to 63 from 204 species , named:

AMGO AMKE AMOY AMRO BBPL BHCO BHGU RNPH REPH
ROST BRBO CHSW DUNL EUST FOTE
SBDO GRYE HADU HOME LEYE NOPI MALL MASH PAWA
PEEP PESA PISI RBNU REDH RUDU
RUTU SAGU SATE SCAU SOSP POJA RBME RBGU UBBG
UCAT UNBI UNEI UNFR UNPE UNLA
UNLG UNST BANS WHIM GREG MODO UNSP WIPH WODU
YCNH YRWA BRSP BLKI BCPE BOGU
BRNO COGO DASC

species UNMU

is linked to 3 from 204 species , named:

UNGO TBMU UNSK

species UNSA

is linked to 5 from 204 species , named:

CEDW GBTE SNGO UNEG UNFI

species UNSG

is linked to 12 from 204 species , named:

REPH MASH RBME ROYT UBBG UNLA UNST AUSH
ATPU BRPE UNPH UNSH

species UNST

is linked to 66 from 204 species , named:

AMGO AMKE AMOY AMRO BBPL BHCO BHGU RNPH
REPH ROST BRBO CHSW DUNL EUST FOTE
SBDO GRYE HADU HOME LEYE NOPI MALL MASH
PAWA PESA PISI RBNU REDH RUDU RUTU
RWBL SAGU SATE SCAU SEPL SOSP POJA RBME
RBGU UBBG UCAT UNEI UNFR UNPE UNLA
UNME UNSG BANS WHIM GREG MODO WIPH WODU
YCNH YRWA AUSH BRPE BRSP BLKI BCPE
BOGU BRNO CANG COGO DASC AWPE

species UNTB

is linked to 0 from 204 species

species WTIR

is linked to 14 from 204 species , named:

ABDU GRCO CATE LIGU HEPE LTJA PUMA RNGR
SAND TRES UNWA MYWA BRTE BLTE

species WWSC

is linked to 6 from 204 species , named:

COSH RAZO RTLO UNTE COTE WISP

species BANS

is linked to 80 from 204 species

COLO DOVE GBBG AMGO AMKE AMOY AMRO BBPL
BHCO BHGU ROST BRBO CHSW COME DEJU
DUNL EUST GADW GRHE GBHE SBDO GRYE HADU
HOME LESA LEYE LIGU NOPI ICGU LAGU
MALL OSPR PAWA PEEP PESA PISI PUSA RBNU
REDH RUDU RUTU RWBL SAGU SATE SCAU
SEPL SESA SOSP POJA RBGU SPSA TRES UCAT
ULSB UNBI UNEI UNFR UNPE UNLG UNME
UNST MYWA WFSP WHIM GLGU GOME GREG MODO
WILL WIPH WODU YCNH YRWA UCRT BLKI
BCPE BOGU BRNO CANG AWPE

species UNWA

is linked to 23 from 204 species , named:

ABDU GRCO CATE COME DEJU GBHE LESA LIGU
HEPE LTJA OSPR PUMA RNGR SAND SESA
TRES WTIR MYWA WFSP GLGU GOME BRTE BLTE

species USAN

is linked to 0 from 204 species

species USSB

is linked to 3 from 204 species , named:

GRSC GWIE UNDU

species MYWA

is linked to 48 from 204 species , named:

ABDU BHCO BHGU GRCO CATE COME DEJU DUNL
GADW GRHE GBHE LESA LIGU HEPE ICGU
LTJA MALL OSPR PEEP PUMA PUSA REDH RWBL
SAND SEPL SESA SOSP SPSA TRES ULSB
UNEI UNPE WTIR BANS UNWA WFSP WHIM GLGU
GOME MODO BRTE WILL WODU YRWA UCRT
BLTE CANG AWPE

species WFSP
is linked to 72 from 204 species , named:
AMGO AMKE AMOY AMRO BBPL BHCO BHGU GRCO
BRBO CATE CHSW COME DEJU DUNL EUST
GADW GRHE GBHE SBDO GRYE HADU HOME LESA
LEYE LIGU NOPI ICGU LTJA MALL OSPR
PAWA PEEP PESA PISI PUMA PUSA RBNU REDH
RUDU RUTU RWBL SAGU SAND SATE SEPL
SESA SOSP SPSA TRES UCAT ULSB UNEI UNFR
UNPE BANS UNWA MYWA WHIM GLGU GOME
GREG MODO WILL WIPH WODU YCNH YRWA UCRT
BLTE BRNO CANG AWPE

species WHIM
is linked to 80 from 204 species
COLO DOVE GBBG AMGO AMKE AMOY AMRO BBPL
BHCO BHGU ROST BRBO CHSW COME DEJU
DUNL EUST GADW GRHE GBHE SBDO GRYE HADU
HOME LESA LEYE LIGU NOPI ICGU LAGU

MALL OSPP PAWA PEEP PESA PISI PUSA RBNU
REDH RUDU RUTU RWBL SAGU SATE SCAU
SEPL SESA SOSP POJA RBGU SPSA TRES UCAT
ULSB UNBI UNEI UNFR UNPE UNLG UNME
UNST BANS MYWA WFSP GLGU GOME GREG MODO
WILL WIPH WODU YCNH YRWA UCRT BLKI
BCPE BOGU BRNO CANG AWPE

species BLPW
is linked to 0 from 204 species

species BTBW
is linked to 0 from 204 species

species GLGU
is linked to 74 from 204 species , named:
AMGO AMKE AMOY AMRO BBPL BHCO BHGU GRCO
BRBO CATE CHSW COME DEJU DUNL EUST
GADW GRHE GBHE SBDO GRYE HADU HOME LESA
LEYE LIGU MAFR NOPI ICGU LTJA MALL
OSPR PAWA PEEP PESA PISI PUMA PUSA RBNU
REDH RUDU RUTU RWBL SAGU SAND SATE
SEPL SESA SOSP SPSA TRES UCAT ULSB UNEI
UNFR UNPE BANS UNWA MYWA WFSP WHIM
GOME GREG MODO BRTE WILL WIPH WODU YCNH
YRWA UCRT BLTE BRNO CANG AWPE

species GOME

is linked to 69 from 204 species , named:

AMGO AMKE AMOY AMRO BBPL BHCO BHGU BRBO
CATE CHSW COME DEJU DUNL EUST GADW
GRHE GBHE SBDO GRYE HADU HOME LESA LEYE
LIGU NOPI ICGU LTJA MALL OSPR PAWA
PEEP PESA PISI PUSA RBNU REDH RUDU RUTU
RWBL SAGU SATE SEPL SESA SOSP SPSA
TRES UCAT ULSB UNEI UNFR UNPE BANS UNWA
MYWA WFSP WHIM GLGU GREG MODO WILL
WIPH WODU YCNH YRWA UCRT BLTE BRNO CANG AWPE

species GREG

is linked to 79 from 204 species , named:

COLO DOVE GBBG AMGO AMKE AMOY AMRO BBPL
BHCO BHGU GRSH ROST BRBO CHSW COME
DEJU DUNL EUST GADW GRHE GBHE SBDO GRYE
HADU HOME LESA LEYE NOPI ICGU LAGU
MALL OSPR PAWA PEEP PESA PISI PUSA RBNU
REDH RUDU RUTU RWBL SAGU SATE SCAU
SEPL SESA SOSP POJA RBGU SPSA TRES UCAT
ULSB UNBI UNEI UNFR UNPE UNLG UNME
UNST BANS WFSP WHIM GLGU GOME MODO WILL
WIPH WODU YCNH YRWA UCRT BLKI BCPE
BOGU BRNO CANG AWPE

species MERL

is linked to 0 from 204 species

species MODO

is linked to 78 from 204 species , named:

COLO GBBG AMGO AMKE AMOY AMRO BBPL BHCO
BHGU ROST BRBO CHSW COME DEJU DUNL
EUST GADW GRHE GBHE SBDO GRYE HADU HOME
LESA LEYE LIGU NOPI ICGU LAGU MALL
OSPR PAWA PEEP PESA PISI PUSA RBNU REDH
RUDU RUTU RWBL SAGU SATE SCAU SEPL
SESA SOSP POJA RBGU SPSA TRES UCAT ULSB
UNBI UNEI UNFR UNPE UNME UNST BANS
MYWA WFSP WHIM GLGU GOME GREG WILL WIPH
WODU YCNH YRWA UCRT BLKI BCPE BOGU
BRNO CANG AWPE

species RUBL

is linked to 0 from 204 species

species BRTE

is linked to 20 from 204 species

ABDU GRCO CATE DEJU GBHE LESA LIGU MAFR
HEPE LTJA OSPR PUMA RNGR SAND TRES
WTIR UNWA MYWA GLGU BLTE

species UNSK

is linked to 8 from 204 species , named:

BARS LBBG SHOR UNGO UNJA TBMU UNGR UNMU

species UNSP

is linked to 27 from 204 species , named:

BLSC COLO DCCO DOVE GBBG LTDU NOGA GRSH
RNPH ROST UNCO FOTE LAGU POJA RGBU
SOSH UNBI UNDD UNLT UNLG UNME BRSP BLKI
BCPE BOGU COGO DASC

species UNTE

is linked to 7 from 204 species , named:

BLSC COSH RAZO RTLO WWSC COTE WISP

species WILL

is linked to 59 from 204 species , named:

AMKE AMRO BBPL BHCO BHGU BRBO CHSW COME
DEJU DUNL EUST GADW GRHE GBHE SBDO
GRYE HADU HOME LESA LEYE LIGU NOPI MALL
OSPR PAWA PESA PISI PUSA RBNU REDH
RUDU RUTU RWBL SAGU SATE SEPL SESA SOSP
SPSA TRES ULSB UNEI UNFR UNPE BANS
MYWA WFSP WHIM GLGU GOME GREG MODO WIPH
WODU YCNH YRWA UCRT BRNO AWPE

species WIPH

is linked to 79 from 204 species , named:

COLO DOVE GBBG AMGO AMKE AMOY AMRO BBPL

BHCO BHGU GRSH ROST BRBO CHSW COME
DEJU DUNL EUST GADW GRHE GBHE SBDO GRYE
HADU HOME LESA LEYE NOPI ICGU LAGU
MALL OSPL PAWA PEEP PESA PISI PUSA RBNU
REDH RUDU RUTU RWBL SAGU SATE SCAU
SEPL SESA SOSP POJA RBGU SPSA TRES UCAT
ULSB UNBI UNEI UNFR UNPE UNLG UNME
UNST BANS WFSP WHIM GLGU GOME GREG MODO
WILL WODU YCNH YRWA UCRT BLKI BCPE
BOGU BRNO CANG AWPE

species WODU
is linked to 80 from 204 species
COLO DOVE GBBG AMGO AMKE AMOY AMRO BBPL
BHCO BHGU ROST BRBO CHSW COME DEJU
DUNL EUST GADW GRHE GBHE SBDO GRYE HADU
HOME LESA LEYE LIGU NOPI ICGU LAGU
MALL OSPL PAWA PEEP PESA PISI PUSA RBNU
REDH RUDU RUTU RWBL SAGU SATE SCAU
SEPL SESA SOSP POJA RBGU SPSA TRES UCAT
ULSB UNBI UNEI UNFR UNPE UNLG UNME
UNST BANS MYWA WFSP WHIM GLGU GOME GREG
MODO WILL WIPH YCNH YRWA UCRT BLKI
BCPE BOGU BRNO CANG AWPE

species WTSP
is linked to 0 from 204 species

species YBCH
is linked to 0 from 204 species

species YCNH
is linked to 79 from 204 species , named:
COLO DOVE GBBG AMGO AMKE AMOY AMRO BBPL
BHC0 BHGU GRSH ROST BRBO CHSW COME
DEJU DUNL EUST GADW GRHE GBHE SBDO GRYE
HADU HOME LESA LEYE NOPI ICGU LAGU
MALL OSPL PAWA PEEP PESA PISI PUSA RBNU
REDH RUDU RUTU RWBL SAGU SATE SCAU
SEPL SESA SOSP POJA RBGU SPSA TRES UCAT
ULSB UNBI UNEI UNFR UNPE UNLG UNME
UNST BANS WFSP WHIM GLGU GOME GREG MODO
WILL WIPH WODU YRWA UCRT BLKI BCPE
BOGU BRNO CANG AWPE

species YRWA
is linked to 78 from 204 species , named:
COLO GBBG AMGO AMKE AMOY AMRO BBPL BHC0 BHGU
ROST BRBO CHSW COME DEJU DUNL
EUST GADW GRHE GBHE SBDO GRYE HADU HOME LESA
LEYE LIGU NOPI ICGU LAGU MALL
OSPL PAWA PEEP PESA PISI PUSA RBNU REDH RUDU
RUTU RWBL SAGU SATE SCAU SEPL
SESA SOSP POJA RBGU SPSA TRES UCAT ULSB UNBI

UNEI UNFR UNPE UNME UNST BANS
MYWA WFSP WHIM GLGU GOME GREG MODO WILL WIPH
WODU YCNH UCRT BLKI BCPE BOGU
BRNO CANG AWPE

species YWAR
is linked to 0 from 204 species

species UNFI
is linked to 5 from 204 species , named:
CEDW GBTE SNGO UNEG UNSA

species UCRT
is linked to 59 from 204 species , named:
AMKE AMRO BBPL BHCO BHGU BRBO CHSW COME
DEJU DUNL EUST GADW GRHE GBHE SBDO
GRYE HADU HOME LESA LEYE LIGU NOPI MALL
OSPR PAWA PESA PISI PUSA RBNU REDH
RUDU RUTU RWBL SAGU SATE SEPL SESA SOSP
SPSA TRES ULSB UNEI UNFR UNPE BANS
MYWA WFSP WHIM GLGU GOME GREG MODO WILL
WIPH WODU YCNH YRWA BRNO AWPE

species AUSH
is linked to 9 from 204 species , named:
REPH MASH RBME UBBG UNLA UNSG UNST ATPU
BRPE

species RTHU
is linked to 0 from 204 species

species BRAN
is linked to 0 from 204 species

species UNHU
is linked to 0 from 204 species

species ATPU
is linked to 11 from 204 species , named:
REPH MASH RBME ROYT UBBG UNLA UNSG AUSH
BRPE UNPH UNSH

species BLGU
is linked to 8 from 204 species , named:
COMU ARTE UNCO LETE UNDD UNPA SPSK PAJA

species BRPE
is linked to 12 from 204 species , named:
REPH MASH RBME ROYT UBBG UNLA UNSG UNST
AUSH ATPU UNPH UNSH

species HERG
is linked to 1/204 vertex , named:
NOGA

species PAJA

is linked to 7 from 204 species , named:

COMU ARTE UNCO LETE UNDD SPSK BLGU

species BRSP

is linked to 28 from 204 species , named:

COLO DCCO DOVE GBBG NOGA GRSH RNPH ROST
UNCO FOTE GRSK LAGU SCAU POJA RBGU
SOSH UNBI UNDD UNLT UNLG UNME UNST UNSP
BLKI BCPE BOGU COGO DASC

species BLKI

is linked to 62 from 204 species , named:

DOVE AMGO AMKE AMOY AMRO BBPL BHCO BHGU
RNPH ROST BRBO CHSW DUNL EUST SBDO
GRYE HADU HOME LEYE NOPI LESP MALL PAWA
PEEP PESA PISI RBNU REDH RUDU RUTU
RWBL SAGU SATE SEPL SOSP POJA RBGU UCAT
UNBI UNEI UNFR UNPE UNLG UNME UNST
BANS WHIM GREG MODO UNSP WIPH WODU YCNH
YRWA BRSP BCPE BOGU BRNO CANG COGO
DASC AWPE

species BCPE

is linked to 64 from 204 species , named:

DOVE AMGO AMKE AMOY AMRO BBPL BHCO BHGU

RNPH REPH ROST BRBO CHSW DUNL EUST
FOTE SBDO GRYE HADU HOME LEYE NOPI HOGR
LAGU MALL MASH PAWA PESA PISI RBNU
REDH RUDU RUTU SAGU SATE SCAU POJA RBME
RBGU SOSH UBBG UCAT UNBI UNFR UNPE
UNLA UNLG UNME UNST BANS WHIM GREG MODO
UNSP WIPH WODU YCNH YRWA BRSP BLKI
BOGU BRNO COGO DASC

species BLTE

is linked to 24 from 204 species , named:

ABDU GRCO CATE COME DEJU GBHE LESA LIGU
MAFR HEPE LTJA OSPR PUMA RNGR SAND
SESA TRES WTIR UNWA MYWA WFSP GLGU GOME BRTE

species BOGU

is linked to 63 from 204 species , named:

DOVE AMGO AMKE AMOY AMRO BBPL BHCO BHGU
RNPH ROST BRBO CHSW DUNL EUST FOTE
SBDO GRYE HADU HOME LEYE NOPI LESP MALL
PAWA PEEP PESA PISI RBNU REDH RUDU
RUTU RWBL SAGU SATE SEPL SOSP POJA RBGU
UCAT UNBI UNEI UNFR UNPE UNLG UNME
UNST BANS WHIM GREG MODO UNSP WIPH WODU
YCNH YRWA BRSP BLKI BCPE BRNO CANG
COGO DASC AWPE

species BRNO

is linked to 79 from 204 species , named:

COLO DOVE GBBG AMGO AMKE AMOY AMRO BBPL
BHO BHGU GRSH ROST BRBO CHSW COME
DEJU DUNL EUST GADW GRHE GBHE SBDO GRYE
HADU HOME LESA LEYE NOPI ICGU LAGU
MALL OSPR PAWA PEEP PESA PISI PUSA RBNU
REDH RUDU RUTU RWBL SAGU SATE SCAU
SEPL SESA SOSP POJA RBGU SPSA TRES UCAT
ULSB UNBI UNEI UNFR UNPE UNLG UNME
UNST BANS WFSP WHIM GLGU GOME GREG MODO
WILL WIPH WODU YCNH YRWA UCRT BLKI
BCPE BOGU CANG AWPE

species BUFF

is linked to 2 from 204 species , named:

DCCO UNAL

species CANG

is linked to 64 from 204 species , named:

AMGO AMKE AMOY AMRO BBPL BHO BHGU BRBO
CHSW COME DEJU DUNL EUST GBHE SBDO
GRYE HADU HOME LESA LEYE LIGU NOPI ICGU
LAGU MALL OSPR PAWA PEEP PESA PISI
RBNU REDH RUDU RUTU RWBL SAGU SATE SCAU
SEPL SESA SOSP RBGU TRES UCAT UNEI
UNFR UNPE UNST BANS MYWA WFSP WHIM GLGU

GOME GREG MODO WIPH WODU YCNH YRWA
BLKI BOGU BRNO AWPE

species COEI
is linked to 3 from 204 species , named:
UNSC UNGU UNLO

species COGO
is linked to 26 from 204 species , named:
COLO DCCO DOVE GBBG NOGA GRSH RNPH ROST
FOTE LAGU SCAU POJA RBGU SOSH UNBI
UNDD UNLT UNLG UNME UNST UNSP BRSP BLKI BCPE BOGU DASC

species COTE
is linked to 5 from 204 species , named:
COSH NOFU LESP WWSC UNTE

species WISP
is linked to 5 from 204 species , named:
COSH RAZO RTLO WWSC UNTE

species UNPH
is linked to 6 from 204 species , named:
ROYT UNAL UNSG ATPU BRPE UNSH

species UNSH
is linked to 6 from 204 species , named:

ROYT UNAL UNSG ATPU BRPE UNPH

species DASC

is linked to 23 from 204 species , named:

DOVE GBBG RNPH ROST FOTE LAGU MASH SCAU
POJA RBGU SOSH SOTE UNBI UNLT UNLG
UNME UNST UNSP BRSP BLKI BCPE BOGU COGO

species AWPE

is linked to 70 from 204 species

AMGO AMKE AMOY AMRO BBPL BHCO BHGU BRBO
CHSW COME DEJU DUNL EUST GADW GRHE
GBHE SBDO GRYE HADU HOME LESA LEYE LIGU
NOPI ICCU MALL OSPR PAWA PEEP PESA
PISI PUSA RBNU REDH RUDU RUTU RWBL SAGU
SATE SCAU SEPL SESA SOSP RBGU SPSA
TRES UCAT ULSB UNEI UNFR UNPE UNST BANS
MYWA WFSP WHIM GLGU GOME GREG MODO
WILL WIPH WODU YCNH YRWA UCRT BLKI BOGU BRNO CANG

species BUPE

is linked to 0 from 204 species

Neighbors for $\alpha = 0.6$

We found the following structure for the threshold $\alpha = .6$

species BLSC

is linked to 9 from 204 species , named:

COLO DCCO GBBG LTDU NOGA GRSH RAZO
SOSH UNLT

species COLO

is linked to 9 from 204 species , named:

BLSC DOVE GBBG LTDU NOGA GRSH SOSH
UNLT UNSP

species COMU

is linked to 7 from 204 species , named:

ARTE UNCO LETE UNDD SPSK BLGU PAJA

species COSH

is linked to 2 from 204 species , named:

WWSC UNTE

species DCCO

is linked to 6 from 204 species , named:

BLSC LTDU RAZO SOSH UNLT BUFF

species DOVE

is linked to 13 from 204 species , named:

COLO GBBG GRSH RNPH FOTE LAGU
SOSH UNBI UNLT UNLG UNSP BRSP COGO

species GBBG

is linked to 10 from 204 species , named:

BLSC COLO DOVE LTDU GRSH LAGU

SOSH UNLT UNLG UNSP

species LTDU

is linked to 9 from 204 species , named

BLSC COLO DCCO GBBG NOGA GRSH

RAZO SOSH UNLT

species NOFU

is linked to 2 from 204 species , named:

LESP COTE

species NOGA

is linked to 4 from 204 species , named:

BLSC COLO LTDU GRSH

species SUSC

is linked to 0 from 204 species , named:

species ABDU

is linked to 8 from 204 species , named:

GRCO HEPE PUMA Rngr SAND WTIR

BRTE BLTE

species AMCO

is linked to 0 from 204 species , named:

species AMGO

is linked to 52 from 204 species , named:

AMKE AMOY AMRO BBPL BHCO BHGU

BRBO CHSW COME DUNL EUST SBDO GRYE

HADU HOME

LESA LEYE NOPI ICGU MALL OSPR

PAWA PEEP PESA PISI RBNU REDH RUDU

RUTU RWBL

SAGU SATE SEPL SESA SOSP UCAT

UNEI UNFR UNPE BANS WFSP WHIM GOME

GREG MODO

WIPH WODU YCNH YRWA BRNO CANG

AWPE

species AMKE

is linked to 52 from 204 species , named:

AMGO AMOY AMRO BBPL BHCO BHGU

BRBO CHSW COME DUNL EUST SBDO

GRYE HADU HOME

LESA LEYE NOPI ICGU MALL OSPR

PAWA PEEP PESA PISI RBNU REDH RUDU RUTU

RWBL

SAGU SATE SEPL SESA SOSP UCAT

UNEI UNFR UNPE BANS WFSP WHIM GOME

GREG MODO

WIPH WODU YCNH YRWA BRNO CANG AWPE

species AMOY

is linked to 52 from 204 species , named:

AMGO AMKE AMRO BBPL BHCO BHGU

BRBO CHSW COME DUNL EUST SBDO GRYE HADU HOME

LESA LEYE NOPI ICGU MALL OSPR

PAWA PEEP PESA PISI RBNU REDH RUDU RUTU RWBL

SAGU SATE SEPL SESA SOSP UCAT

UNEI UNFR UNPE BANS WFSP WHIM GOME GREG MODO

WIPH WODU YCNH YRWA BRNO CANG AWPE

species AMPI

is linked to 0 from 204 species , named:

species AMRE

is linked to 0 from 204 species , named:

species AMRO

is linked to 52 from 204 species , named:

AMGO AMKE AMOY BBPL BHCO BHGU

BRBO CHSW COME DUNL EUST SBDO GRYE HADU HOME

LESA LEYE NOPI ICGU MALL OSPR

PAWA PEEP PESA PISI RBNU REDH RUDU RUTU RWBL

SAGU SATE SEPL SESA SOSP UCAT

UNEI UNFR UNPE BANS WFSP WHIM GOME GREG MODO

WIPH WODU YCNH YRWA BRNO CANG AWPE

species BAOR

is linked to 0 from 204 species , named:

species BARS

is linked to 6 from 204 species , named:

LBBG GRSK HOGR SOTE SHOR UNGR

species BBPL

is linked to 52 from 204 species , named:

AMGO AMKE AMOY AMRO BHCO BHGU BRBO
CHSW COME DUNL EUST SBDO GRYE HADU HOME
LESA LEYE NOPI ICGU MALL OSPR PAWA
PEEP PESA PISI RBNU REDH RUDU RUTU RWBL
SAGU SATE SEPL SESA SOSP UCAT UNEI
UNFR UNPE BANS WFSP WHIM GOME GREG MODO
WIPH WODU YCNH YRWA BRNO CANG AWPE

species BHCO

is linked to 55 from 204 species , named:

AMGO AMKE AMOY AMRO BBPL BHGU BRBO
CHSW COME DEJU DUNL EUST GBHE SBDO GRYE
HADU HOME LESA LEYE NOPI ICGU MALL
OSPR PAWA PEEP PESA PISI RBNU REDH RUDU
RUTU RWBL SAGU SATE SEPL SESA SOSP
UCAT UNEI UNFR UNPE BANS WFSP WHIM GLGU
GOME GREG MODO WIPH WODU YCNH YRWA
BRNO CANG AWPE

species BHGU

is linked to 55 from 204 species , named:

AMGO AMKE AMOY AMRO BBPL BHCO BRBO
CHSW COME DEJU DUNL EUST GBHE SBDO GRYE
HADU HOME LESA LEYE NOPI ICGU MALL
OSPR PAWA PEEP PESA PISI RBNU REDH RUDU
RUTU RWBL SAGU SATE SEPL SESA SOSP
UCAT UNEI UNFR UNPE BANS WFSP WHIM GLGU
GOME GREG MODO WIPH WODU YCNH YRWA
BRNO CANG AWPE

species ARTE

is linked to 7 from 204 species , named:

COMU UNCO LETE UNDD SPSK BLGU PAJA

species GROO

is linked to 14 from 204 species , named:

ABDU CATE GBHE LIGU HEPE LTJA PUMA
SAND TRES WTIR UNWA MYWA BRTE BLTE

species GRSH

is linked to 8 from 204 species , named:

BLSC COLO DOVE GBBG LTDU NOGA SOSH UNLT

species RAZO

is linked to 4 from 204 species , named:

BLSC DCCO LTDU UNTE

species RNPH

is linked to 13 from 204 species , named:

DOVE ROST FOTE POJA UNBI UNLG UNME

UNST UNSP BRSP BCPE COGO DASC

species RTLO

is linked to 1 from 204 vertex , named:

WISP

species REPH

is linked to 10 from 204 species , named:

MASH RBME UBBG UNLA UNME UNSG UNST

AUSH ATPU BRPE

species ROST

is linked to 13 from 204 species , named:

RNPH FOTE SCAU POJA RBGU UNME UNST

BRSP BLKI BCPE BOGU COGO DASC

species UNCO

is linked to 5 from 204 species , named:

COMU ARTE LETE UNDD SPSK

species UNSC

is linked to 3 from 204 species , named:

UNGU UNLO COEI

species BRBO

is linked to 52 from 204 species , named:

AMGO AMKE AMOY AMRO BBPL BHCO BHGU
CHSW COME DUNL EUST SBDO GRYE HADU HOME
LESA LEYE NOPI ICGU MALL OSPR PAWA
PEEP PESA PISI RBNU REDH RUDU RUTU RWBL
SAGU SATE SEPL SESA SOSP UCAT UNEI
UNFR UNPE BANS WFSP WHIM GOME GREG MODO
WIPH WODU YCNH YRWA BRNO CANG AWPE

species CATE

is linked to 15 from 204 species , named:

GRCO DEJU GBHE LIGU HEPE LTJA PUMA
SAND TRES WTIR UNWA MYWA GLGU BRTE BLTE

species CEDW

is linked to 5 from 204 species , named:

GBTE SNGO UNEG UNSA UNFI

species CHSW

is linked to 53 from 204 species , named:

AMGO AMKE AMOY AMRO BBPL BHCO BHGU
BRBO COME DUNL EUST GBHE SBDO GRYE HADU
HOME LESA LEYE NOPI ICGU MALL OSPR
PAWA PEEP PESA PISI RBNU REDH RUDU RUTU

RWBL SAGU SATE SEPL SESA SOSP UCAT
UNEI UNFR UNPE BANS WFSP WHIM GOME GREG
MODO WIPH WODU YCNH YRWA BRNO CANG
AWPE

species COME
is linked to 58 from 204 species , named:
AMGO AMKE AMOY AMRO BBPL BHCO BHGU
BRBO CHSW DEJU DUNL EUST GBHE SBDO GRYE
HADU HOME LESA LEYE LIGU NOPI ICGU
MALL OSPR PAWA PEEP PESA PISI RBNU REDH
RUDU RUTU RWBL SAGU SATE SEPL SESA
SOSP TRES UCAT UNEI UNFR UNPE BANS MYWA
WFSP WHIM GLGU GOME GREG MODO WIPH
WODU YCNH YRWA BRNO CANG AWPE

species COYE
is linked to 0 from 204 species , named:

species DEJU
is linked to 26 from 204 species , named:
BHCO BHGU CATE COME DUNL GBHE LESA
LIGU ICGU OSPR REDH RWBL SEPL SESA SOSP
TRES UNEI UNPE MYWA WFSP GLGU GOME
MODO YRWA CANG AWPE

species DUNL

is linked to 55 from 204 species , named:

AMGO AMKE AMOY AMRO BBPL BHCO BHGU
BRBO CHSW COME DEJU EUST GBHE SBDO GRYE
HADU HOME LESA LEYE NOPI ICGU MALL
OSPR PAWA PEEP PESA PISI RBNU REDH RUDU
RUTU RWBL SAGU SATE SEPL SESA SOSP
UCAT UNEI UNFR UNPE BANS WFSP WHIM GLGU
GOME GREG MODO WIPH WODU YCNH YRWA
BRNO CANG AWPE

species EUST

is linked to 52 from 204 species , named:

AMGO AMKE AMOY AMRO BBPL BHCO BHGU
BRBO CHSW COME DUNL SBDO GRYE HADU HOME
LESA LEYE NOPI ICGU MALL OSPR PAWA
PEEP PESA PISI RBNU REDH RUDU RUTU RWBL
SAGU SATE SEPL SESA SOSP UCAT UNEI
UNFR UNPE BANS WFSP WHIM GOME GREG MODO
WIPH WODU YCNH YRWA BRNO CANG AWPE

species FEPE

is linked to 0 from 204 species , named:

species FOTE

is linked to 13 from 204 species , named:

DOVE RNPH ROST POJA UNBI UNLG UNME
UNST UNSP BRSP BCPE COGO DASC

species GADW
is linked to 6 from 204 species , named:
GRHE PUSA SPSA ULSB WILL UCRT

species GBTE
is linked to 5 from 204 species , named:
CEDW SNGO UNEG UNSA UNFI

species GCKI
is linked to 0 from 204 species , named:

species GRCA
is linked to 0 from 204 species , named:

species GRHE
is linked to 6 from 204 species , named:
GADW PUSA SPSA ULSB WILL UCRT

species GRSC
is linked to 2 from 204 species , named:
GWIE USSB

species GBHE
is linked to 41 from 204 species , named:
BHO BHGU GROO CATE CHSW COME DEJU
DUNL LESA LIGU ICGU LTJA MALL OSPR PAWA

PEEP PUMA REDH RUTU RWBL SAND SEPL
SESA SOSP TRES UNEI UNFR UNPE BANS UNWA
MYWA WFSP WHIM GLGU GOME MODO WODU
YRWA BLTE CANG AWPE

species SBDO

is linked to 52 from 204 species , named:

AMGO AMKE AMOY AMRO BBPL BHCO BHGU
BRBO CHSW COME DUNL EUST GRYE HADU HOME
LESA LEYE NOPI ICGU MALL OSPR PAWA
PEEP PESA PISI RBNU REDH RUDU RUTU RWBL
SAGU SATE SEPL SESA SOSP UCAT UNEI
UNFR UNPE BANS WFSP WHIM GOME GREG MODO
WIPH WODU YCNH YRWA BRNO CANG AWPE

species GRYE

is linked to 52 from 204 species , named:

AMGO AMKE AMOY AMRO BBPL BHCO BHGU
BRBO CHSW COME DUNL EUST SBDO HADU HOME
LESA LEYE NOPI ICGU MALL OSPR PAWA
PEEP PESA PISI RBNU REDH RUDU RUTU RWBL
SAGU SATE SEPL SESA SOSP UCAT UNEI
UNFR UNPE BANS WFSP WHIM GOME GREG MODO
WIPH WODU YCNH YRWA BRNO CANG AWPE

species GWIE

is linked to 2 from 204 species , named:

GRSC USSB

species HADU

is linked to 52 from 204 species , named:

AMGO AMKE AMOY AMRO BBPL BHCO BHGU
BRBO CHSW COME DUNL EUST SBDO GRYE HOME
LESA LEYE NOPI ICGU MALL OSPR PAWA
PEEP PESA PISI RBNU REDH RUDU RUTU RWBL
SAGU SATE SEPL SESA SOSP UCAT UNEI
UNFR UNPE BANS WFSP WHIM GOME GREG MODO
WIPH WODU YCNH YRWA BRNO CANG AWPE

species HOME

is linked to 52 from 204 species , named:

AMGO AMKE AMOY AMRO BBPL BHCO BHGU
BRBO CHSW COME DUNL EUST SBDO GRYE HADU
LESA LEYE NOPI ICGU MALL OSPR PAWA
PEEP PESA PISI RBNU REDH RUDU RUTU RWBL
SAGU SATE SEPL SESA SOSP UCAT UNEI
UNFR UNPE BANS WFSP WHIM GOME GREG MODO
WIPH WODU YCNH YRWA BRNO CANG AWPE

species LBBG

is linked to 6 from 204 species , named:

BARS SHOR UNJA TBMU UNGR UNSK

species LESA

is linked to 58 from 204 species , named:

AMGO AMKE AMOY AMRO BBPL BHCO BHGU
BRBO CHSW COME DEJU DUNL EUST GBHE SBDO
GRYE HADU HOME LEYE LIGU NOPI ICGU
MALL OSPR PAWA PEEP PESA PISI RBNU REDH
RUDU RUTU RWBL SAGU SATE SEPL SESA
SOSP TRES UCAT UNEI UNFR UNPE BANS MYWA
WFSP WHIM GLGU GOME GREG MODO WIPH
WODU YCNH YRWA BRNO CANG AWPE

species LESC

is linked to 0 from 204 species , named:

species LEYE

is linked to 52 from 204 species , named:

AMGO AMKE AMOY AMRO BBPL BHCO BHGU
BRBO CHSW COME DUNL EUST SBDO GRYE HADU
HOME LESA NOPI ICGU MALL OSPR PAWA
PEEP PESA PISI RBNU REDH RUDU RUTU RWBL
SAGU SATE SEPL SESA SOSP UCAT UNEI
UNFR UNPE BANS WFSP WHIM GOME GREG MODO
WIPH WODU YCNH YRWA BRNO CANG AWPE

species LIGU

is linked to 20 from 204 species , named:

GRCO CATE COME DEJU GBHE LESA HEPE
LTJA OSPR PUMA SAND SESA TRES UNWA MYWA

WFSP GLGU GOME BRTE BLTE

species LISH

is linked to 0 from 204 species , named:

species MABO

is linked to 0 from 204 species , named:

species MAFR

is linked to 0 from 204 species , named:

species MAWA

is linked to 0 from 204 species , named:

species NOFL

is linked to 0 from 204 species , named:

species NOHA

is linked to 0 from 204 species , named:

species NOPI

is linked to 52 from 204 species , named:

AMGO AMKE AMOY AMRO BBPL BHCO BHGU

BRBO CHSW COME DUNL EUST SBDO GRYE HADU

HOME LESA LEYE ICGU MALL OSPR PAWA

PEEP PESA PISI RBNU REDH RUDU RUTU RWBL

SAGU SATE SEPL SESA SOSP UCAT UNEI

UNFR UNPE BANS WFSP WHIM GOME GREG MODO
WIPH WODU YCNH YRWA BRNO CANG AWPE

species NOTE
is linked to 0 from 204 species , named:

species GRSK
is linked to 5 from 204 species , named:
BARS HOGR SOTE SHOR UNGR

species HEPE
is linked to 14 from 204 species , named:
ABDU GRCO CATE LIGU LTJA PUMA Rngr
SAND TRES WTIR UNWA MYWA BRTE BLTE

species HOGR
is linked to 4 from 204 species , named:
BARS GRSK SOTE UNGR

species ICGU
is linked to 56 from 204 species , named:
AMGO AMKE AMOY AMRO BBPL BHCO BHGU
BRBO CHSW COME DEJU DUNL EUST GBHE SBDO
GRYE HADU HOME LESA LEYE NOPI MALL
OSPR PAWA PEEP PESA PISI RBNU REDH RUDU
RUTU RWBL SAGU SATE SEPL SESA SOSP
TRES UCAT UNEI UNFR UNPE BANS WFSP WHIM

GLGU GOME GREG MODO WIPH WODU YCNH
YRWA BRNO CANG AWPE

species LAGU
is linked to 6 from 204 species , named:
DOVE GBBG SOSH UNLT UNLG UNSP

species LESP
is linked to 1 from 204 vertex , named:
NOFU

species LETE
is linked to 7 from 204 species , named:
COMU ARTE UNCO UNDD SPSK BLGU PAJA

species LTJA
is linked to 12 from 204 species , named:
GRCO CATE GBHE LIGU HEPE PUMA SAND
TRES UNWA MYWA BRTE BLTE

species MALL
is linked to 53 from 204 species , named:
AMGO AMKE AMOY AMRO BBPL BHCO BHGU
BRBO CHSW COME DUNL EUST GBHE SBDO GRYE
HADU HOME LESA LEYE NOPI ICGU OSPR
PAWA PEEP PESA PISI RBNU REDH RUDU RUTU
RWBL SAGU SATE SEPL SESA SOSP UCAT

UNEI UNFR UNPE BANS WFSP WHIM GOME GREG
MODO WIPH WODU YCNH YRWA BRNO CANG
AWPE

species MASH
is linked to 10 from 204 species , named:
REPH RBME UBBG UNLA UNME UNSG UNST
AUSH ATPU BRPE

species NOWA
is linked to 0 from 204 species , named:

species OSPR
is linked to 58 from 204 species , named:
AMGO AMKE AMOY AMRO BBPL BHCO BHGU
BRBO CHSW COME DEJU DUNL EUST GBHE SBDO
GRYE HADU HOME LESA LEYE LIGU NOPI
ICGU MALL PAWA PEEP PESA PISI RBNU REDH
RUDU RUTU RWBL SAGU SATE SEPL SESA
SOSP TRES UCAT UNEI UNFR UNPE BANS MYWA
WFSP WHIM GLGU GOME GREG MODO WIPH
WODU YCNH YRWA BRNO CANG AWPE

species PAWA
is linked to 53 from 204 species , named:
AMGO AMKE AMOY AMRO BBPL BHCO BHGU
BRBO CHSW COME DUNL EUST GBHE SBDO GRYE

HADU HOME LESA LEYE NOPI ICGU MALL
OSPR PEEP PESA PISI RBNU REDH RUDU RUTU
RWBL SAGU SATE SEPL SESA SOSP UCAT
UNEI UNFR UNPE BANS WFSP WHIM GOME GREG
MODO WIPH WODU YCNH YRWA BRNO CANG
AWPE

species PEEP
is linked to 53 from 204 species , named:
AMGO AMKE AMOY AMRO BBPL BHCO BHGU
BRBO CHSW COME DUNL EUST GBHE SBDO GRYE
HADU HOME LESA LEYE NOPI ICGU MALL
OSPR PAWA PESA PISI RBNU REDH RUDU RUTU
RWBL SAGU SATE SEPL SESA SOSP UCAT
UNEI UNFR UNPE BANS WFSP WHIM GOME GREG
MODO WIPH WODU YCNH YRWA BRNO CANG AWPE

species PEFA
is linked to 0 from 204 species , named:

species PESA
is linked to 52 from 204 species , named:
AMGO AMKE AMOY AMRO BBPL BHCO BHGU
BRBO CHSW COME DUNL EUST SBDO GRYE HADU
HOME LESA LEYE NOPI ICGU MALL OSPR
PAWA PEEP PISI RBNU REDH RUDU RUTU RWBL
SAGU SATE SEPL SESA SOSP UCAT UNEI

UNFR UNPE BANS WFSP WHIM GOME GREG MODO
WIPH WODU YCNH YRWA BRNO CANG AWPE

species PISI

is linked to 52 from 204 species , named:

AMGO AMKE AMOY AMRO BBPL BHCO BHGU
BRBO CHSW COME DUNL EUST SBDO GRYE HADU
HOME LESA LEYE NOPI ICGU MALL OSPR
PAWA PEEP PESA RBNU REDH RUDU RUTU RWBL
SAGU SATE SEPL SESA SOSP UCAT UNEI
UNFR UNPE BANS WFSP WHIM GOME GREG MODO
WIPH WODU YCNH YRWA BRNO CANG AWPE

species PUMA

is linked to 14 from 204 species , named:

ABDU GRCO CATE GBHE LIGU HEPE LTJA
SAND TRES WTIR UNWA MYWA BRTE BLTE

species PUSA

is linked to 6 from 204 species , named:

GADW GRHE SPSA ULSB WILL UCRT

species RBNU

is linked to 52 from 204 species , named:

AMGO AMKE AMOY AMRO BBPL BHCO BHGU
BRBO CHSW COME DUNL EUST SBDO GRYE HADU
HOME LESA LEYE NOPI ICGU MALL OSPR

PAWA PEEP PESA PISI REDH RUDU RUTU RWBL
SAGU SATE SEPL SESA SOSP UCAT UNEI
UNFR UNPE BANS WFSP WHIM GOME GREG MODO
WIPH WODU YCNH YRWA BRNO CANG AWPE

species RBTR
is linked to 0 from 204 species , named:

species RCKI
is linked to 0 from 204 species , named:

species REDH
is linked to 55 from 204 species , named:
AMGO AMKE AMOY AMRO BBPL BHCO BHGU
BRBO CHSW COME DEJU DUNL EUST GBHE SBDO
GRYE HADU HOME LESA LEYE NOPI ICGU
MALL OSPR PAWA PEEP PESA PISI RBNU RUDU
RUTU RWBL SAGU SATE SEPL SESA SOSP
UCAT UNEI UNFR UNPE BANS WFSP WHIM GLGU
GOME GREG MODO WIPH WODU YCNH YRWA
BRNO CANG AWPE

species Rngr
is linked to 3 from 204 species , named:
ABDU HEPE WTIR

species RUDU

is linked to 52 from 204 species , named:

AMGO AMKE AMOY AMRO BBPL BHCO BHGU
BRBO CHSW COME DUNL EUST SBDO GRYE HADU
HOME LESA LEYE NOPI ICGU MALL OSPR
PAWA PEEP PESA PISI RBNU REDH RUTU RWBL
SAGU SATE SEPL SESA SOSP UCAT UNEI
UNFR UNPE BANS WFSP WHIM GOME GREG MODO
WIPH WODU YCNH YRWA BRNO CANG AWPE

species RUTU

is linked to 53 from 204 species , named:

AMGO AMKE AMOY AMRO BBPL BHCO BHGU
BRBO CHSW COME DUNL EUST GBHE SBDO GRYE
HADU HOME LESA LEYE NOPI ICGU MALL
OSPR PAWA PEEP PESA PISI RBNU REDH RUDU
RWBL SAGU SATE SEPL SESA SOSP UCAT
UNEI UNFR UNPE BANS WFSP WHIM GOME GREG
MODO WIPH WODU YCNH YRWA BRNO CANG AWPE

species RWBL

is linked to 56 from 204 species , named:

AMGO AMKE AMOY AMRO BBPL BHCO BHGU
BRBO CHSW COME DEJU DUNL EUST GBHE SBDO
GRYE HADU HOME LESA LEYE NOPI ICGU
MALL OSPR PAWA PEEP PESA PISI RBNU REDH
RUDU RUTU SAGU SATE SEPL SESA SOSP
TRES UCAT UNEI UNFR UNPE BANS WFSP WHIM

GLGU GOME GREG MODO WIPH WODU YCNH
YRWA BRNO CANG AWPE

species SAGU

is linked to 52 from 204 species , named:

AMGO AMKE AMOY AMRO BBPL BHCO BHGU
BRBO CHSW COME DUNL EUST SBDO GRYE HADU
HOME LESA LEYE NOPI ICGU MALL OSPR
PAWA PEEP PESA PISI RBNU REDH RUDU RUTU
RWBL SATE SEPL SESA SOSP UCAT UNEI
UNFR UNPE BANS WFSP WHIM GOME GREG MODO
WIPH WODU YCNH YRWA BRNO CANG AWPE

species SAND

is linked to 14 from 204 species , named:

ABDU GRCO CATE GBHE LIGU HEPE LTJA
PUMA TRES WTIR UNWA MYWA BRTE BLTE

species SATE

is linked to 52 from 204 species , named:

AMGO AMKE AMOY AMRO BBPL BHCO BHGU
BRBO CHSW COME DUNL EUST SBDO GRYE HADU
HOME LESA LEYE NOPI ICGU MALL OSPR
PAWA PEEP PESA PISI RBNU REDH RUDU RUTU
RWBL SAGU SEPL SESA SOSP UCAT UNEI
UNFR UNPE BANS WFSP WHIM GOME GREG MODO
WIPH WODU YCNH YRWA BRNO CANG AWPE

species SAVS

is linked to 0 from 204 species , named:

species SCAU

is linked to 6 from 204 species , named:

ROST POJA UNME UNST BCPE DASC

species SEPL

is linked to 56 from 204 species , named:

AMGO AMKE AMOY AMRO BBPL BHCO BHGU
BRBO CHSW COME DEJU DUNL EUST GBHE SBDO
GRYE HADU HOME LESA LEYE NOPI ICGU
MALL OSPR PAWA PEEP PESA PISI RBNU REDH
RUDU RUTU RWBL SAGU SATE SESA SOSP
TRES UCAT UNEI UNFR UNPE BANS WFSP WHIM
GLGU GOME GREG MODO WIPH WODU YCNH
YRWA BRNO CANG AWPE

species SESA

is linked to 58 from 204 species , named:

AMGO AMKE AMOY AMRO BBPL BHCO BHGU
BRBO CHSW COME DEJU DUNL EUST GBHE SBDO
GRYE HADU HOME LESA LEYE LIGU NOPI
ICGU MALL OSPR PAWA PEEP PESA PISI RBNU
REDH RUDU RUTU RWBL SAGU SATE SEPL
SOSP TRES UCAT UNEI UNFR UNPE BANS MYWA

WFSP WHIM GLGU GOME GREG MODO WIPH
WODU YCNH YRWA BRNO CANG AWPE

species SNBU
is linked to 0 from 204 species , named:

species SNGO
is linked to 5 from 204 species , named:
CEDW GBTE UNEG UNSA UNFI

species SOSP
is linked to 56 from 204 species , named:
AMGO AMKE AMOY AMRO BBPL BHCO BHGU
BRBO CHSW COME DEJU DUNL EUST GBHE SBDO
GRYE HADU HOME LESA LEYE NOPI ICGU
MALL OSPR PAWA PEEP PESA PISI RBNU REDH
RUDU RUTU RWBL SAGU SATE SEPL SESA
TRES UCAT UNEI UNFR UNPE BANS WFSP WHIM
GLGU GOME GREG MODO WIPH WODU YCNH
YRWA BRNO CANG AWPE

species POJA
is linked to 11 from 204 species , named:
RNPH ROST FOTE SCAU UNME UNST BRSP
BLKI BCPE COGO DASC

species RBME

is linked to 10 from 204 species , named:

REPH MASH UBBG UNLA UNME UNSG UNST
AUSH ATPU BRPE

species RBGU

is linked to 6 from 204 species , named:

ROST UNBI UNLG BLKI BCPE BOGU

species ROYT

is linked to 5 from 204 species , named:

UNSG ATPU BRPE UNPH UNSH

species SOSH

is linked to 12 from 204 species , named:

BLSC COLO DCCO DOVE GBBG LTDU
GRSH
LAGU UNBI UNLT UNLG UNSP

species SOTE

is linked to 5 from 204 species , named:

BARS GRSK HOGR SHOR UNGR

species SHOR

is linked to 8 from 204 species , named:

BARS LBBG GRSK SOTE UNJA TBMU
UNG R UNSK

species SPSA
is linked to 6 from 204 species , named:
GADW GRHE PUSA ULSB WILL UCRT

species TRES
is linked to 26 from 204 species , named:
GRCO CATE COME DEJU GBHE LESA
LIGU HEPE ICGU LTJA OSPR PUMA RWBL SAND SEPL
SESA SOSP UNEI UNWA MYWA WFSP
GLGU GOME BRTE BLTE AWPE

species UBBG
is linked to 9 from 204 species , named:
REPH MASH RBME UNLA UNSG UNST
AUSH ATPU BRPE

species UCAT
is linked to 52 from 204 species , named:
AMGO AMKE AMOY AMRO BBPL BHCO
BHGU BRBO CHSW COME DUNL EUST SBDO GRYE HADU
HOME LESA LEYE NOPI ICGU MALL
OSPR PAWA PEEP PESA PISI RBNU REDH RUDU RUTU
RWBL SAGU SATE SEPL SESA SOSP
UNEI UNFR UNPE BANS WFSP WHIM GOME GREG MODO
WIPH WODU YCNH YRWA BRNO CANG
AWPE

species ULSB

is linked to 6 from 204 species , named:

GADW GRHE PUSA SPSA WILL UCRT

species UNBI

is linked to 13 from 204 species , named:

DOVE RNPH FOTE RBGU SOSH UNLT

UNLG UNSP BRSP BLKI BOGU COGO DASC

species UNDD

is linked to 5 from 204 species , named:

COMU ARTE UNCO LETE SPSK

species UNEG

is linked to 5 from 204 species , named:

CEDW GBTE SNGO UNSA UNFI

species UNEI

is linked to 56 from 204 species , named:

AMGO AMKE AMOY AMRO BBPL BHCO

BHGU BRBO CHSW COME DEJU DUNL EUST GBHE SBDO

GRYE HADU HOME LESA LEYE NOPI

ICGU MALL OSPR PAWA PEEP PESA PISI RBNU REDH

RUDU RUTU RWBL SAGU SATE SEPL

SESA SOSP TRES UCAT UNFR UNPE BANS WFSP WHIM

GLGU GOME GREG MODO WIPH WODU

YCNH YRWA BRNO CANG AWPE

species UNFR

is linked to 53 from 204 species , named:

AMGO AMKE AMOY AMRO BBPL BHCO

BHGU BRBO CHSW COME DUNL EUST GBHE SBDO GRYE

HADU HOME LESA LEYE NOPI ICGU

MALL OSPR PAWA PEEP PESA PISI RBNU REDH RUDU

RUTU RWBL SAGU SATE SEPL SESA

SOSP UCAT UNEI UNPE BANS WFSP WHIM GOME GREG

MODO WIPH WODU YCNH YRWA BRNO CANG AWPE

species UNGO

is linked to 1 from 204 vertex , named:

UNMU

species UNLT

is linked to 12 from 204 species , named:

BLSC COLO DCCO DOVE GBBG LTDU

GRSH LAGU SOSH UNBI UNLG UNSP

species UNPA

is linked to 0 from 204 species , named:

species UNPT

is linked to 0 from 204 species , named:

species UNJA

is linked to 4 from 204 species , named:

LBBG SHOR TBMU UNSK

species UNPE

is linked to 55 from 204 species , named:

AMGO AMKE AMOY AMRO BBPL BHCO

BHGU BRBO CHSW COME DEJU DUNL EUST GBHE SBDO

GRYE HADU HOME LESA LEYE NOPI

ICGU MALL OSPR PAWA PEEP PESA PISI RBNU REDH

RUDU RUTU RWBL SAGU SATE SEPL

SESA SOSP UCAT UNEI UNFR BANS WFSP WHIM GLGU

GOME GREG MODO WIPH WODU YCNH YRWA BRNO CANG AWPE

species SPAR

is linked to 0 from 204 species , named:

species SWAL

is linked to 0 from 204 species , named:

species SPSK

is linked to 7 from 204 species , named:

COMU ARTE UNCO LETE UNDD BLGU PAJA

species TBMU

is linked to 4 from 204 species , named:

LBBG SHOR UNJA UNSK

species UNAL
is linked to 2 from 204 species , named:
BUFF UNPH

species UNDU
is linked to 0 from 204 species , named:

species UNGR
is linked to 6 from 204 species , named:
BARS LBBG GRSK HOGR SOTE SHOR

species UNGU
is linked to 3 from 204 species , named:
UNSC UNLO COEI

species UNLA
is linked to 10 from 204 species , named:
REPH MASH RBME UBBG UNME UNSG
UNST AUSH ATPU BRPE

species UNLG
is linked to 13 from 204 species , named:
DOVE GBBG RNPH FOTE LAGU RBGU
SOSH UNBI UNLT UNSP BRSP BOGU COGO

species UNLO
is linked to 3 from 204 species , named:

UNSC UNGU COEI

species UNME
is linked to 14 from 204 species , named:
RNPH REPH ROST FOTE MASH SCAU
POJA RBME UNLA UNST BRSP BCPE COGO DASC

species UNMU
is linked to 1 from 204 vertex , named:
UNGO

species UNSA
is linked to 5 from 204 species , named:
CEDW GBTE SNGO UNEG UNFI

species UNSG
is linked to 10 from 204 species , named:
REPH MASH RBME ROYT UBBG UNLA
AUSH ATPU BRPE UNSH

species UNST
is linked to 15 from 204 species , named:
RNPH REPH ROST FOTE MASH SCAU
POJA RBME UBBG UNLA UNME BRSP BCPE COGO DASC

species UNTB
is linked to 0 from 204 species , named:

species WTIR

is linked to 10 from 204 species , named:

ABDU GRCO CATE HEPE PUMA RNCR

SAND UNWA BRTE BLTE

species WWSC

is linked to 3 from 204 species , named:

COSH UNTE COTE

species BANS

is linked to 53 from 204 species , named:

AMGO AMKE AMOY AMRO BBPL BHCO

BHGU BRBO CHSW COME DUNL EUST GBHE SBDO GRYE

HADU HOME LESA LEYE NOPI ICGU

MALL OSPR PAWA PEEP PESA PISI RBNU REDH RUDU

RUTU RWBL SAGU SATE SEPL SESA

SOSP UCAT UNEI UNFR UNPE WFSP WHIM GOME GREG

MODO WIPH WODU YCNH YRWA BRNO

CANG AWPE

species UNWA

is linked to 13 from 204 species , named:

GRCO CATE GBHE LIGU HEPE LTJA

PUMA SAND TRES WTIR MYWA BRTE BLTE

species USAN

is linked to 0 from 204 species , named:

species USSB

is linked to 2 from 204 species , named:

GRSC GWIE

species MYWA

is linked to 20 from 204 species , named:

GRCO CATE COME DEJU GBHE LESA

LIGU HEPE LTJA OSRP PUMA SAND SESA TRES UNWA

WFSP GLGU GOME BRTE BLTE

species WFSP

is linked to 58 from 204 species , named:

AMGO AMKE AMOY AMRO BBPL BHCO

BHGU BRBO CHSW COME DEJU DUNL EUST GBHE SBDO

GRYE HADU HOME LESA LEYE LIGU

NOPI ICGU MALL OSRP PAWA PEEP PESA PISI RBNU

REDH RUDU RUTU RWBL SAGU SATE

SEPL SESA SOSP TRES UCAT UNEI UNFR UNPE BANS

MYWA WHIM GLGU GOME GREG MODO

WIPH WODU YCNH YRWA BRNO CANG AWPE

species WHIM

is linked to 53 from 204 species , named:

AMGO AMKE AMOY AMRO BBPL BHCO

BHGU BRBO CHSW COME DUNL EUST GBHE SBDO GRYE

HADU HOME LESA LEYE NOPI ICGU
MALL OSPR PAWA PEEP PESA PISI RBNU REDH RUDU
RUTU RWBL SAGU SATE SEPL SESA
SOSP UCAT UNEI UNFR UNPE BANS WFSP GOME GREG
MODO WIPH WODU YCNH YRWA BRNO
CANG AWPE

species BLPW
is linked to 0 from 204 species , named:

species BTBW
is linked to 0 from 204 species , named:

species GLGU
is linked to 26 from 204 species , named:
BHCO BHGU CATE COME DEJU DUNL
GBHE LESA LIGU ICGU OSPR REDH RWBL SEPL SESA
SOSP TRES UNEI UNPE MYWA WFSP
GOME MODO YRWA CANG AWPE

species GOME
is linked to 58 from 204 species , named:
AMGO AMKE AMOY AMRO BBPL BHCO
BHGU BRBO CHSW COME DEJU DUNL EUST GBHE SBDO
GRYE HADU HOME LESA LEYE LIGU
NOPI ICGU MALL OSPR PAWA PEEP PESA PISI RBNU
REDH RUDU RUTU RWBL SAGU SATE

SEPL SESA SOSP TRES UCAT UNEI UNFR UNPE BANS
MYWA WFSP WHIM GLGU GREG MODO
WIPH WODU YCNH YRWA BRNO CANG AWPE

species GREG
is linked to 52 from 204 species , named:
AMGO AMKE AMOY AMRO BBPL BHCO
BHGU BRBO CHSW COME DUNL EUST SBDO GRYE HADU
HOME LESA LEYE NOPI ICGU MALL
OSPR PAWA PEEP PESA PISI RBNU REDH RUDU RUTU
RWBL SAGU SATE SEPL SESA SOSP
UCAT UNEI UNFR UNPE BANS WFSP WHIM GOME MODO
WIPH WODU YCNH YRWA BRNO CANG AWPE

species MERL
is linked to 0 from 204 species , named:

species MODO
is linked to 55 from 204 species , named:
AMGO AMKE AMOY AMRO BBPL BHCO
BHGU BRBO CHSW COME DEJU DUNL EUST GBHE SBDO
GRYE HADU HOME LESA LEYE NOPI
ICGU MALL OSPR PAWA PEEP PESA PISI RBNU REDH
RUDU RUTU RWBL SAGU SATE SEPL
SESA SOSP UCAT UNEI UNFR UNPE BANS WFSP WHIM
GLGU GOME GREG WIPH WODU YCNH
YRWA BRNO CANG AWPE

species RUBL
is linked to 0 from 204 species , named:

species BRTE
is linked to 13 from 204 species , named:
ABDU GRCO CATE LIGU HEPE LTJA
PUMA SAND TRES WTIR UNWA MYWA BLTE

species UNSK
is linked to 4 from 204 species , named:
LBBG SHOR UNJA TBMU

species UNSP
is linked to 13 from 204 species , named:
COLO DOVE GBBG RNPH FOTE LAGU
SOSH UNBI UNLT UNLG BRSP COGO DASC

species UNTE
is linked to 3 from 204 species , named:
COSH RAZO WWSC

species WILL
is linked to 6 from 204 species , named:
GADW GRHE PUSA SPSA ULSB UCRT

species WIPH

is linked to 52 from 204 species , named:

AMGO AMKE AMOY AMRO BBPL BHCO
BHGU BRBO CHSW COME DUNL EUST SBDO GRYE HADU
HOME LESA LEYE NOPI ICGU MALL
OSPR PAWA PEEP PESA PISI RBNU REDH RUDU RUTU
RWBL SAGU SATE SEPL SESA SOSP
UCAT UNEI UNFR UNPE BANS WFSP WHIM GOME GREG
MODO WODU YCNH YRWA BRNO CANG AWPE

species WODU

is linked to 53 from 204 species , named:

AMGO AMKE AMOY AMRO BBPL BHCO
BHGU BRBO CHSW COME DUNL EUST GBHE SBDO GRYE
HADU HOME LESA LEYE NOPI ICGU
MALL OSPR PAWA PEEP PESA PISI RBNU REDH RUDU
RUTU RWBL SAGU SATE SEPL SESA
SOSP UCAT UNEI UNFR UNPE BANS WFSP WHIM GOME
GREG MODO WIPH YCNH YRWA BRNO CANG AWPE

species WTSP

is linked to 0 from 204 species , named:

species YBCH

is linked to 0 from 204 species , named:

species YCNH

is linked to 52 from 204 species , named:

AMGO AMKE AMOY AMRO BBPL BHCO
BHGU BRBO CHSW COME DUNL EUST SBDO GRYE HADU
HOME LESA LEYE NOPI ICGU MALL
OSPR PAWA PEEP PESA PISI RBNU REDH RUDU RUTU
RWBL SAGU SATE SEPL SESA SOSP
UCAT UNEI UNFR UNPE BANS WFSP WHIM GOME GREG
MODO WIPH WODU YRWA BRNO CANG AWPE

species YRWA

is linked to 55 from 204 species , named:

AMGO AMKE AMOY AMRO BBPL BHCO
BHGU BRBO CHSW COME DEJU DUNL EUST GBHE SBDO
GRYE HADU HOME LESA LEYE NOPI
ICGU MALL OSPR PAWA PEEP PESA PISI RBNU REDH
RUDU RUTU RWBL SAGU SATE SEPL
SESA SOSP UCAT UNEI UNFR UNPE BANS WFSP WHIM
GLGU GOME GREG MODO WIPH WODU
YCNH BRNO CANG AWPE

species YWAR

is linked to 0 from 204 species , named:

species UNFI

is linked to 5 from 204 species , named:

CEDW GBTE SNGO UNEG UNSA

species UCRT

is linked to 6 from 204 species , named:

GADW GRHE PUSA SPSA ULSB WILL

species AUSH

is linked to 7 from 204 species , named:

REPH MASH RBME UBBG UNLA UNSG BRPE

species RTHU

is linked to 0 from 204 species , named:

species BRAN

is linked to 0 from 204 species , named:

species UNHU

is linked to 0 from 204 species , named:

species ATPU

is linked to 10 from 204 species , named:

REPH MASH RBME ROYT UBBG

UNLA UNSG BRPE UNPH UNSH

species BLGU

is linked to 5 from 204 species , named:

COMU ARTE LETE SPSK PAJA

species BRPE

is linked to 11 from 204 species , named:

REPH MASH RBME ROYT UBBG
UNLA UNSG AUSH ATPU UNPH UNSH

species HERG
is linked to 0 from 204 species , named:

species PAJA
is linked to 5 from 204 species , named:
COMU ARTE LETE SPSK BLGU

species BRSP
is linked to 13 from 204 species , named:
DOVE RNPH ROST FOTE POJA UNBI
UNLG UNME UNST UNSP BCPE COGO DASC

species BLKI
is linked to 6 from 204 species , named:
ROST POJA RBGU UNBI BCPE BOGU

species BCPE
is linked to 13 from 204 species , named:
RNPH ROST FOTE SCAU POJA RBGU
UNME UNST BRSP BLKI BOGU COGO DASC

species BLTE
is linked to 14 from 204 species , named:
ABDU GRCO CATE GBHE LIGU HEPE

LTJA PUMA SAND TRES WTIR UNWA MYWA BRTE

species BOGU

is linked to 6 from 204 species , named:

ROST RBGU UNBI UNLG BLKI BCPE

species BRNO

is linked to 52 from 204 species , named:

AMGO AMKE AMOY AMRO BBPL BHCO

BHGU BRBO CHSW COME DUNL EUST SBDO GRYE HADU

HOME LESA LEYE NOPI ICGU MALL

OSPR PAWA PEEP PESA PISI RBNU REDH RUDU RUTU

RWBL SAGU SATE SEPL SESA SOSP

UCAT UNEI UNFR UNPE BANS WFSP WHIM GOME GREG

MODO WIPH WODU YCNH YRWA CANG AWPE

species BUFF

is linked to 2 from 204 species , named:

DCCO UNAL

species CANG

is linked to 55 from 204 species , named:

AMGO AMKE AMOY AMRO BBPL BHCO

BHGU BRBO CHSW COME DEJU DUNL EUST GBHE SBDO

GRYE HADU HOME LESA LEYE NOPI

ICGU MALL OSPR PAWA PEEP PESA PISI RBNU REDH

RUDU RUTU RWBL SAGU SATE SEPL

SESA SOSP UCAT UNEI UNFR UNPE BANS WFSP WHIM
GLGU GOME GREG MODO WIPH WODU
YCNH YRWA BRNO AWPE

species COEI
is linked to 3 from 204 species , named:
UNSC UNGU UNLO

species COGO
is linked to 13 from 204 species , named:
DOVE RNPH ROST FOTE POJA UNBI
UNLG UNME UNST UNSP BRSP BCPE DASC

species COTE
is linked to 2 from 204 species , named:
NOFU WWSC

species WISP
is linked to 1 from 204 vertex , named:
RTLO

species UNPH
is linked to 5 from 204 species , named:
ROYT UNAL ATPU BRPE UNSH

species UNSH
is linked to 5 from 204 species , named:

ROYT UNSG ATPU BRPE UNPH

species DASC

is linked to 12 from 204 species , named:

RNPH ROST FOTE SCAU POJA UNBI

UNME UNST UNSP BRSP BCPE COGO

species AWPE

is linked to 56 from 204 species , named:

AMGO AMKE AMOY AMRO BBPL BHCO

BHGU BRBO CHSW COME DEJU DUNL EUST GBHE SBDO

GRYE HADU HOME LESA LEYE NOPI

ICGU MALL OSPR PAWA PEEP PESA PISI RBNU REDH

RUDU RUTU RWBL SAGU SATE SEPL

SESA SOSP TRES UCAT UNEI UNFR UNPE BANS WFSP

WHIM GLGU GOME GREG MODO WIPIH

WODU YCNH YRWA BRNO CANG

species BUPE

is linked to 0 from 204 species , named:

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