

## Recent ornithological literature from the Caribbean: 2022

An annual feature of the *Journal of Caribbean Ornithology*, this annotated guide alerts readers to recent ornithological literature from the Caribbean basin that has appeared elsewhere. Most of these articles appeared in 2022, although a few that we previously missed are also summarized below. We would also like to include any unpublished theses or other reports that may be difficult to find in more universally available abstract services. We invite readers of the *Journal of Caribbean Ornithology* to alert our compiler, Steven Latta, to other articles that should be highlighted in this section. Our hope is that by providing these summaries we will increase the exchange of knowledge among Caribbean ornithologists and conservationists.

—Steven C. Latta

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Acosta, M., L. Mugica, A. Rodríguez-Ochoa, A. González, S. Aguilar, and K. Aguilar. 2022. Caracterización de la colonia reproductiva de aves marinas en Cayo Hijo de los Ballenatos, Archipiélago de los Canarreos, Cuba. (Characterization of the reproductive colony of marine birds at Cayo Hijo de los Ballenatos, Canarreos Archipelago, Cuba). *Revista Cubana de Ciencias Biológicas* 10:1–8.—E-mail: [lmugica2876@gmail.com](mailto:lmugica2876@gmail.com).

Acosta-Cruz, M., L. Mugica-Valdés, and K. Aguilar-Mugica. 2022. Aves del Jardín Botánico Nacional de Cuba. (Birds of the National Botanical Garden of Cuba). Agencia Medio Ambiente, Sello Editorial AMA, La Habana, Cuba. 260 pp. ISBN 978-959-300-226-4.—E-mail: [lmugica2876@gmail.com](mailto:lmugica2876@gmail.com).

Almonte-Espinosa, H., 2022. Estructura y composición de un ensamblaje de aves asociadas al río Maimón, República Dominicana. (Structure and composition of bird assemblages associated with the Maimón River, Dominican Republic). *Novitates Caribaea* 19:24–42.—E-mail: [h.almonte@mnhn.gov.do](mailto:h.almonte@mnhn.gov.do).

Andres, B.A., L. Moore, A.R. Cox, B. Frei, and C. Roy. 2022. A preliminary assessment of shorebird harvest in coastal Guyana. *Wader Study* 129:39–47.—Although shorebird harvests at coastal sites has likely declined over the last two decades, an estimated 37,000 shorebirds were harvested at two sites and sold in one market during the post-breeding period of 2020. Given the limited scale of this study, the total harvest along the country's entire coast was undoubtedly greater. Small *Calidris* sandpipers dominated the post-breeding migratory shorebird assemblage and, along with the Semipalmated Plover (*Charadrius semipalmatus*), were most abundant in the harvest. Shorebird harvest in Guyana exceeded that of all Caribbean islands combined where harvest estimates were available. E-mail: [brad\\_andres@fws.gov](mailto:brad_andres@fws.gov).

Brown, A.F., Y. Lawrie, T.J. Shannon, J.M. Collinson, G.M. Kirwan,

and M. Stervander. 2022. First genetic data for the critically endangered Cuban endemic Zapata Rail *Cyanolimnas cerverai*, and the taxonomic implications. *Journal of Ornithology* 163:945–952.—E-mail: [martin@stervander.com](mailto:martin@stervander.com).

Brunner, A., B. Dossman, V. Jirinec, K. Percy, C. Tonra, E. Johnson, and P. Marra. 2022. Migratory behavior and connectivity revealed in a secretive Neotropical migratory songbird, the Swainson's Warbler. *Journal of Field Ornithology* 93:5.—Tracking individuals of *Limnothlypis swainsonii* from populations breeding in Louisiana, U.S., and wintering in Jamaica, a migratory divide was identified between the western and eastern portions of the species' distribution. Most Louisiana breeders overwintered in southern Mexico and the Yucatan peninsula, whereas the Jamaica individuals migrated to the eastern portion of the Swainson's Warbler breeding range. E-mail: [arb433@cornell.edu](mailto:arb433@cornell.edu).

Brunner, A.R., P.P. Marra, and C.M. Tonra. 2022. Vulnerable Neotropical migratory songbird demonstrates flexibility in space use in response to rainfall change. *Ornithology* 139:ukaco05.—Radio telemetry was used to estimate home ranges of nonbreeding Swainson's Warblers (*Limnothlypis swainsonii*) bi-seasonally and bi-weekly in Jamaica during dry and wet periods. Habitat structure and food (leaf litter arthropod) availability within each home range was measured to determine possible predictors of space use change. Individuals modified the area and/or location of their home ranges with changes in precipitation, and those occupying more open habitats had greater changes in home range area as seasonal rainfall increased. As food increased following rain, individuals constricted their home ranges (bi-weekly) or shifted spatially (bi-seasonally) to a novel area with greater food availability. This suggests individuals are able to rapidly respond to how their environment changes, presumably adjusting to trade-offs between home range size and resource availability. E-mail: [arb433@cornell.edu](mailto:arb433@cornell.edu).

Buckmire, Z., N. Constant, J.A. Hanna, J. Nurse, A. Joseph-Witzig, and J. Daniel. 2022. Mangroves for money: ecological and social impacts of recent development projects in the mangrove forests of Grenada, West Indies. *Human Ecology: Forests* 32:36–52.—E-mail: [gfcinc1@gmail.com](mailto:gfcinc1@gmail.com).

Byerly, P.A., S. Zaluski, D. Nellis, and P.L. Leberg. 2021. Effects of colony disturbance on reproductive success and nest defense behaviors in Caribbean Roseate Terns. *Waterbirds* 44:463–471.—E-mail: [pabyerly@gmail.com](mailto:pabyerly@gmail.com).

Cambrone, C., F. Cézilly, R. Wattier, C. Eraud, and E. Bezault. 2022. Levels of genetic differentiation and gene flow between four populations of the Scaly-naped Pigeon, *Patagioenas squamosa*: implications for conservation. *Studies on Neotropical Fauna and Environment* 57:349–361.—Using both mitochondrial DNA and nuclear markers (microsatellites), gene flow, genetic diversity, and genetic structure were investigated among island

populations originating from Puerto Rico, Guadeloupe, Martinique, and Barbados. Evidence for significant genetic differentiation was found only between Barbados and the three other populations, consistent with the fact that the Barbados population originated from escaped captive individuals around 100 yrs ago. E-mail: [christopher.cambrone@yahoo.com](mailto:christopher.cambrone@yahoo.com).

Carlo, T.A., P.H. Camargo, and M.A. Pizo. 2022. Functional ecology of Neotropical frugivorous birds. *Ornithology Research* 30:139–154.—Tradeoffs that occur between fruit-handling capacity and seed dispersal efficiency of birds is discussed, as well as tradeoffs between the digestion of complex vs. simple nutrient classes, and the overall dietary composition and foraging strategies of birds and the implications to community processes. The importance of Neotropical avian frugivores in shaping dynamics of forest regeneration is emphasized. E-mail: [tac17@psu.edu](mailto:tac17@psu.edu).

DeSaix, M.G., E.B. Connell, N. Cortes-Rodríguez, K.E. Omland, P.P. Marra, and C.E. Studds. 2022. Migratory connectivity in a Newfoundland population of the American Redstart (*Setophaga ruticilla*). *Wilson Journal of Ornithology* 134:381–389.—Mitochondrial haplogroups were used to elucidate nonbreeding locations of the Newfoundland population of the American Redstart. The mitochondrial control region of 180 individuals from across the Caribbean was sequenced. Results suggest that the Newfoundland breeding population of the American Redstart has a restricted nonbreeding range in Puerto Rico and Dominican Republic and mixes with individuals from other breeding populations at these sites. E-mail: [mgdesaix@gmail.com](mailto:mgdesaix@gmail.com).

Dossman, B.C., A.D. Rodewald, C.E. Studds, and P.P. Marra. 2022. Migratory birds with delayed spring departure migrate faster but pay the costs. *Ecology* (accepted).—American Redstarts (*Setophaga ruticilla*) were tracked as they migrated from wintering grounds in Jamaica through Florida en route to their breeding areas. Individuals that departed relatively late (10-day delay) migrated at a 43% faster rate which decreased their annual survival by 6.3%. Results are consistent with the hypothesis that spring migrants use speed to compensate for departure delays despite incurring survival costs. This compensatory behavior may potentially underlie differential survival during spring migration and may be particularly widespread across short-lived migratory birds generally considered time-constrained. E-mail: [bd342@cornell.edu](mailto:bd342@cornell.edu).

Faure, J., S. Martén-Rodríguez, J.L. Clark, and S. Joly. 2022. The level of pollination specialization affects the relationship between the shape of flowers and the bills of their hummingbird pollinators in Antillean Gesneriaceae. *International Journal of Plant Sciences* 183:193–204.—The relationship between the corolla shape of Antillean Gesneriaceae and the bills of their hummingbird pollinators is investigated for species with different pollination strategies: specialists (one functional group of pollinators: hummingbirds) and generalists (more than one functional group of pollinators: hummingbirds, bats, and insects) pollination strategy. Corolla shape is correlated with the bill shape of the hummingbird pollinators but the nature of this relationship differs between pollination specialists and generalists. This study suggests that pollinators affect the evolution of flower shape but the nature and strength of the selective pressures are affected by the pollinator guild of the pollinators in the

Antillean Gesneriaceae. E-mail: [julie.faure@umontreal.ca](mailto:julie.faure@umontreal.ca).

Frias-Soler, R.C., A. Bauer, M.A. Grohme, G. Espinosa López, M. Gutiérrez Costa, A. Llanes-Quevedo, F. Van Slobbe, M. Frohme, and M. Wink. 2022. Phylogeny of the order Phoenicopteriformes and population genetics of the Caribbean flamingo (*Phoenicopterus ruber*: Aves). *Zoological Journal of the Linnean Society* 196:1485–1504.—The analysis of the genetic structure of the American Flamingo shows that all Cuban demes constitute a single population isolated from the Bonairean colony. This supports suggestions of the existence of limited connectivity between northern and southern Caribbean colonies. E-mail: [friasoler@gmail.com](mailto:friasoler@gmail.com).

Gómez Mato, Y., Y. Alonso Torrens, and F.R. Hernández Martínez. 2022. Comercio ilegal de aves silvestres y su abundancia en áreas donde son capturadas, municipio Niceto Pérez. (Illegal trade in wild birds and their abundance in areas where they are captured, municipality Niceto Pérez). *Revista Cubana de Ciencias Forestales* 10:121–134.—In Guantánamo province, 95 interviews of persons involved in the bird trade identified 16 species most frequently captured. Census data of wild birds revealed only six of the species most frequently sought illegally. Differences are attributed to seasonality of birds and differences among study sites. E-mail: [yanara@cug.co.cu](mailto:yanara@cug.co.cu).

González, A., A. Jiménez, I. García-Lau, L. Mugica, and M. Acosta. 2022. Ecología trófica de *Calidris minutilla*, *Calidris pusilla* y *Calidris mauri* (Aves: Scolopacidae) en dos humedales naturales de Cuba. (Trophic ecology of *Calidris minutilla*, *Calidris pusilla*, and *Calidris mauri* (Aves: Scolopacidae) in two natural wetlands of Cuba). *Caldasia* 44:154–164.—E-mail: [aglez@fbio.uh.cu](mailto:aglez@fbio.uh.cu).

González, A., A. Rodríguez-Ochoa, L. Mugica, and M. Acosta. 2022. Composition and structure of mixed-species foraging aggregations of waterbirds in Las Salinas, Ciénaga de Zapata, Cuba. *Waterbirds* 45:29–38.—E-mail: [aglez@fbio.uh.cu](mailto:aglez@fbio.uh.cu).

González-Acuña, D., A. Cicchino, D. Echeverry, K. Ardiles, P. Oyarzún-Ruiz, S. Mironov, and L. Moreno. 2022. Ectoparasites of *Columbina passerina insularis* (Columbiformes) in the National Zoological Park, Havana, Cuba. *Revista Brasileira de Parasitologia Veterinária* 31: e018521—E-mail: [lumoreno@udec.cl](mailto:lumoreno@udec.cl).

Hernández, A.P., A.L. Sosa, and J.M. de la Cruz Mora. 2022. Migración otoñal de *Catharus ustulatus* en la península de Guanahacabibes, Pinar del Rio, Cuba: Cambio de estado de permanencia en Cuba. (Autumnal migration of *Catharus ustulatus* in Guanahacabibes península, Pinar del Rio, Cuba: Change of state of permanence in Cuba). *Poeyana* 513:1–8.—E-mail: [alina@ecovida.vega.inf.cu](mailto:alina@ecovida.vega.inf.cu).

Jean-Pierre, A., G. Loranger-Merciris, and F. Cézilly. 2022. Spatial occupancy, local abundance and activity rhythm of three ground dwelling columbid species in the forests of Guadeloupe in relation to environmental factors. *Diversity* 14:480.—Studies of the Ruddy Quail-Dove (*Geotrygon montana*); the Bridled Quail-Dove (*Geotrygon mystacea*); and the Zenaida Dove (*Zenaida aurita*) using 5 camera traps over 14 days on 24 survey stations, resulting in 1680 trap days. E-mail: [aureliej-p@hotmail.fr](mailto:aureliej-p@hotmail.fr).

Kim, S., L. Sales, D. Carreira, and M. Galetti. 2022. Frugivore distributions are associated with plant dispersal syndrome diversity in the Caribbean archipelagos. *Diversity and Distributions* 28:2521–2533.—Authors compiled a review of the diversity and

distributions of 6039 plants and 326 vertebrate frugivores across 105 islands within the Caribbean. 44.6% of Caribbean plants are dispersed through frugivory (endozoochory). Frugivore-related characteristics, namely accumulated body mass of island bird assemblages, were the best predictors of the diversity of seed dispersal syndromes. Biotic characteristics of frugivore communities are important predictors of plant diversity in the Caribbean archipelagos. E-mail: [sxk1332@miami.edu](mailto:sxk1332@miami.edu).

LaPergola, J.B., and C. Riehl. 2022. Opportunity is not everything: genetic monogamy and limited brood parasitism in a colonial woodpecker. *Behavioral Ecology and Sociobiology* 76:1–10.—High breeding density, a feature of colonial nesting, should increase opportunities for infidelity and conspecific brood parasitism because of the close proximity of potential extra-pair mates and parasitic females. Yet, Hispaniolan Woodpeckers (*Melanerpes striatus*), which nest both solitarily and colonially (two or more pairs in the same tree) in the same population, were genetically monogamous and lacked successful brood parasitism. The essential role of paternal care for successful reproduction in the Hispaniolan Woodpecker might have selected against extra-pair mating and conspecific brood parasitism despite the apparent ample opportunities provided by nesting so close to others. E-mail: [jlapblca@gmail.com](mailto:jlapblca@gmail.com).

Lens, J., J. Mackenzy Paul, W. Célestin, D. Beaune, and F. Cézilly. 2022. A baseline survey of waterbirds in five major wetlands of Haiti. *Waterbirds* 44:370–375.—E-mail: [frank.cezilly@u-bourgogne.fr](mailto:frank.cezilly@u-bourgogne.fr).

Madden, H., M. Leopold, F. Rivera-Milán, K. Verdel, E. Eggermont, and P. Jodice. 2022. Reproductive success of Red-Billed Tropicbirds (*Phaethon aethereus*) on St. Eustatius, Caribbean Netherlands. *Waterbirds* 45:39–50.—E-mail: [hannah.madden@wur.nl](mailto:hannah.madden@wur.nl).

Madden, H., Y. Satgé, B. Wilkinson, and P.G. Jodice. 2022. Foraging ecology of Red-billed Tropicbird *Phaethon aethereus* in the Caribbean during early chick rearing revealed by GPS tracking. *Marine Ornithology* 50:165–175.—Researchers opportunistically sampled regurgitates at nest sites, and linked the GPS tracks of foraging adults to remotely sensed environmental variables. Diet samples were dominated by Exocoetidae (59.5%) and Belonidae (14.9%), although 25.5% of samples were unidentifiable due to digestion. Tropicbirds nesting on St. Eustatius exhibited diurnal foraging patterns, foraged in deeper waters with higher chlorophyll concentration, and consumed fewer Exocoetidae species compared to traveling behaviour. The maximum distance traveled from the colony was 953.7 km, with an average trip length of 176.8 ( $\pm$  249.8) km. E-mail: [hannah.madden@wur.nl](mailto:hannah.madden@wur.nl).

McDuffie, L.A., K.S. Christie, A.L. Harrison, A.R. Taylor, B.A. Andres, B. Laliberté, and J.A. Johnson. 2022. Eastern-breeding Lesser Yellowlegs are more likely than western-breeding birds to visit areas with high shorebird hunting during southward migration. *Ornithological Applications* 124:duabo61.—E-mail: [lmcduffie@usgs.gov](mailto:lmcduffie@usgs.gov).

Mejías, M.A., J. Roncal, and D.R. Wilson. 2022. Territorial responses of male Bermuda White-eyed Vireos (*Vireo griseus* subsp. *bermudianus*) reflect phylogenetic similarity of intruders and acoustic similarity of their songs. *Journal of Field Ornithology* 92:431–449.—The behavioral responses of male Bermuda

White-eyed Vireos (*Vireo griseus bermudianus*) to playback of the songs of allopatric species from across the family Vireonidae was examined. Results suggest that male Bermuda Vireos perceive and respond to interspecies variation in the phylogenetically conserved song traits of allopatric species of vireos. This suggests that song divergence, and the ability to distinguish divergent songs, reinforces reproductive isolation and competitor exclusion. E-mail: [mmejias@mun.ca](mailto:mmejias@mun.ca).

Patton, P.T., K. Pacifici, and J.A. Collazo. 2022. Modeling and estimating co-occurrence between the invasive Shiny Cowbird and its Puerto Rican hosts. *Biological Invasions* 24:2951–2960.—Little is known about cowbird parasitism in agro-ecological highlands containing a patchwork of forests, shaded-coffee plantations, and coffee farms without shade. In this paper, co-occurrence rates are estimated as an indicator of parasitism rates between the cowbird and four host species across these three land uses. While there was some evidence that host species richness increased the probability of cowbirds, the parsimonious model assumed no interaction. With this model, the authors found that cowbirds were more likely to overlap with certain hosts in shaded-coffee plantations. This may suggest increased parasitism at these plantations, potentially presenting challenges for managers who advocate for shade restoration to gain ecological services such as biodiversity conservation. E-mail: [pattonp@hawaii.edu](mailto:pattonp@hawaii.edu).

Perrin, A., A. Khimoun, A. Ollivier, Y. Richard, A. Pérez-Rodríguez, B. Faivre, and S. Garnier. 2022. Habitat fragmentation matters more than habitat loss: the case of host-parasite interactions. *Molecular Ecology* (accepted).—The relative influence of tropical forest loss and fragmentation on the prevalence of vector-borne blood parasites of the genera *Plasmodium* and *Haemoproteus* is assessed in six forest bird species. More than 4,000 individual birds were sampled from 58 forest sites in Guadeloupe and Martinique. Forest fragmentation explains twice as much of the variance in prevalence as habitat loss or landscape heterogeneity. In addition, habitat fragmentation leads to an overall rise in prevalence in Guadeloupe, but its effect is variable in Martinique. Both habitat loss and landscape heterogeneity exhibit taxon-specific effects. Results suggest that inter-specific interactions may not respond in the same way as more commonly used biodiversity metrics such as abundance and diversity. E-mail: [antoine.perrin@unil.ch](mailto:antoine.perrin@unil.ch).

Ruiz-Guerra, C., Y. Cifuentes-Sarmiento, O. Gutiérrez, J. Alarza Berrío, and A. Rosado. 2022. Notable records of migratory shorebirds from the Caribbean coast of Colombia. *Wader Study* 129:69–72.—E-mail: [cjruiz@calidris.org.co](mailto:cjruiz@calidris.org.co).

Saint-Louis, L.J., J. Mackenzy Paul, W. Célestin, D. Beaune, and F. Cézilly. 2021. A baseline survey of waterbirds in five major wetlands of Haiti. *Waterbirds* 44:370–375.—E-mail: [frank.cezilly@u-bourgogne.fr](mailto:frank.cezilly@u-bourgogne.fr).

Satgé, Y., E. Rupp, A. Brown, and P. Jodice. 2021. Habitat modelling locates nesting areas of the endangered Black-capped Petrel *Pterodroma hasitata* on Hispaniola and identifies habitat loss. *Bird Conservation International* 31:573–590.—By modeling suitable habitat on Hispaniola using openly available environmental datasets, potentially available nest sites were identified. Elevation, distance to coast, and the influence of tree cover and density emerged as important environmental variables. Based

on model results, the total area of predicted suitable nesting habitat for Black-capped Petrels on Hispaniola has been reduced due to forest loss from hurricanes, forest fires, and encroachment from agriculture between 2000 and 2018. E-mail: [ysatge@clemsun.edu](mailto:ysatge@clemsun.edu).

Satgé, Y.G., B.S. Keitt, C.P. Gaskin, and P. Jodice. 2022. Temporal and spatial segregations between phenotypes of the Diablotin Black-capped Petrel *Pterodroma hasitata* during the breeding and non-breeding periods. [bioRxiv preprint, Cold Spring Harbor Laboratory](#).—Using tracking data, dark and light phenotypes are shown to have distinct non-breeding distributions: the dark form is more restricted to Carolinian and Gulf Stream waters off Hatteras, and the light form is restricted to more northern and pelagic waters. Based on data from two individuals (one of each phenotype), research also appears to confirm that phenotypes share similar nesting areas but that the light form starts breeding 1.5 months earlier. E-mail: [ysatge@clemsun.edu](mailto:ysatge@clemsun.edu).

Schubert, S.C. 2022. Temporal dynamics and seed dispersal in plant-frugivore communities of the Dominican Republic. [Ph.D. dissertation. Old Dominion University, Norfolk, Virginia](#).—E-mail: [scschubert11@gmail.com](mailto:scschubert11@gmail.com).

Son, S.P., T. Alexandrine, S. Motreuil, D. Imbert, and J.R. Gros Désormeaux. 2022. Morphological variation in the Martinican subspecies White-Breasted Thrasher (*Ramphocinclus brachyurus brachyurus*). [Open Journal of Animal Sciences 12:1–15](#).—E-mail: [jrmgrosdesormeaux@yahoo.fr](mailto:jrmgrosdesormeaux@yahoo.fr).

Suárez, W. 2022. Catalogue of Cuban fossil and subfossil birds. [Bulletin of the British Ornithologists' Club 142:10–74](#). All information relating to the Cuban palaeo-avifauna since the first published list in 1928 to the present is summarized and presented as a catalogue with commentary. Data on the composition, systematics and distribution of fossil and subfossil birds from Quaternary (Late Pleistocene-Holocene interval) deposits in Cuba are presented with a necessary critical review.—E-mail:

[ws@wsbirdingtours.com](mailto:ws@wsbirdingtours.com).

Vázquez-Carrero, W. 2022. The influence of habitat composition and food availability on migratory and resident bird abundance and diversity in a subtropical dry forest in Southeastern Puerto Rico (Jobos Bay, Salinas, Puerto Rico). M.S. Thesis. Universidad Ana G. Méndez, Recinto de Gurabo.—E-mail: Not available.

Vollstädt, M.G., M. Galetti, C.N. Kaiser-Bunbury, B.I. Simmons, F. Gonçalves, A.L. Morales-Pérez, L. Navarro, F.L. Tarazona-Tubens, S. Schubert, T. Carlo, and J. Salazar. 2022. Plant-frugivore interactions across the Caribbean islands: modularity, invader complexes and the importance of generalist species. [Diversity and Distributions 28:2361–2374](#).—Published scientific literature, unpublished theses, and other non-peer-reviewed sources were used to compile an extensive dataset of plant-frugivore interactions. These data were used to visualize spatial patterns and conduct a modularity analysis of the cross-island meta-network. Results demonstrate that generalist species and “invader complexes” may facilitate the incorporation of introduced species into plant-frugivore communities. Despite the influx of introduced species, the meta-network was structured into modules related to biogeographical and functional or taxonomic affinities. Findings reveal how introduced species become an integral part of mutualistic systems on tropical islands.—E-mail: [maximilian.vollstaedt@sund.ku.dk](mailto:maximilian.vollstaedt@sund.ku.dk).

Young, A., 2022. Bird use of avocado farms and intact forest in the Dominican Republic. [M.S. Thesis. University of Tennessee at Chattanooga, Chattanooga, TN](#).—E-mail: [averyyoung1991@gmail.com](mailto:averyyoung1991@gmail.com).

Zelenkov, N.V., and E.S. Belichenko. 2022. Dynamics of the late quaternary avifauna of Western Cuba (based on material from El Abrón Cave). [Doklady Biological Sciences 503:54–57](#). Pleiades Publishing.—E-mail: [nzelen@paleo.ru](mailto:nzelen@paleo.ru).