

CV

Name: Riho Marja

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Language skills: Estonian, English, German and Russian

Education:

- 2001–2005 University of Tartu (BSc. Landscape Ecology). **Marja, R.** Bachelor's Degree, 2005, (sup) Evelyn Uuemaa, Ülo Mander. Farmland birds relationships with landscape indices.
- 2005–2007 University of Tartu (MSc. Landscape ecology and environmental protection). **Marja, R.** Master's Degree, 2007, (sup) Evelyn Uuemaa, Ülo Mander. Relationship between bird fauna diversity and landscape metrics in agricultural landscape: Estonian case study.
- 2008–2013 University of Tartu (Ph.D. Landscape ecology and environmental protection). **Marja, R.** Doctor's Degree, 2013, (sup) Irina Herzon, Ülo Mander, The relationships between farmland birds, land use and landscape structure in Northern Europe.
- 2011–2012 Visitor student University of Helsinki
- 2013–2014 Visitor student University of Georg-August (Göttingen)

Institution and occupation

- 1.01.2006–1.08.2012 Agricultural Research Centre
- 1.01.2014–1.12.2016 Estonian Ornithological Society (Estonian BirdLife)
- 1.09.2016–1.12.2016 Visitor scientist University of Georg-August (Göttingen)
- 1.02.2017–1.08.2019 Estonian Environment Agency

R&D related managerial and administrative work

- 2018... COST Action CA17122 Increasing understanding of alien species through citizen science, member of management committee
- 2015–... International Wader Study Group, Member
- 2015–... European Ornithologists' Union
- 2014–2017 COST Action ES1304 Earth System Science and Environmental Management. European network on invasive parakeets: Understanding invasion dynamics and risks to agriculture and society (ParrotNet), member of management committee
- 2012–... Estonian Ornithological Society, member of the council
- 2009–... Founding member of the EstBirding, member of the board
- 2004–... Tartu Ülikooli Looduskaitsering
- 1996–... Estonian Ornithological Society, member

Teaching:

Dissertations under supervision

Thea Perm, master student. Sup, Jaanus Elts, **Riho Marja**, Ortolan bunting (*Emberiza hortulana*) habitat use spatial and temporal dynamics. University of Tartu.

Supervised dissertations

Liis Keerberg, Master thesis, 2015. Sup, **Riho Marja**, Hannes Pehlak, Factors affecting avian community and options of creation and conservation of habitats in quarries. Estonian University of Life Sciences.

Publications in international peer-reviewed journals (Web of Science, Scopus)

- Uuemaa, E., Antrop, M., Roosaare, J., **Marja, R.**, Mander, Ü. 2009. Landscape Metrics and Indices: An Overview of Their Use in Landscape Research. *Living Reviews in Landscape Research*, 3(1): 1–28.
- Marja, R.**, Herzon, I. 2012. The importance of drainage ditches for farmland birds in agricultural landscapes in the Baltic countries: does field type matter? *Ornis Fennica* 89: 170–181.
- Uuemaa, E., Mander, Ü., **Marja, R.** 2013. Trends in the use of landscape spatial metrics as landscape indicators: a review. *Ecological Indicators* 28: 100–106.
- Marja, R.**, Uuemaa, E., Mander, Ü., Elts, J., Truu, J. 2013. Landscape pattern and census area as determinants of the diversity of farmland avifauna in Estonia. *Regional Environmental Change* 13: 1013–1020.
- Marja, R.**, Herzon, I., Rintala, J.N., Tiainen, J., Seimola, T. 2013. Drainage type in agriculture modifies habitat value of fields for farmland birds. *Agriculture, Ecosystems and Environment* 165: 184–189.
- Herzon, I., **Marja, R.**, Menshikova, S., Kondratyev, A. 2014. Farmland bird communities in an agricultural landscape in Northwest Russia: seasonal and spatial patterns. *Agriculture, Ecosystems and Environment* 183: 78–85.
- Marja, R.**, Herzon, I., Viik, E., Elts, J., Mänd, M., Tscharntke, T., Batáry, P. 2014. Environmentally friendly farming as an intermediate strategy between organic and conventional agriculture to support biodiversity. *Biological Conservation*, 178: 146–154.
- Sutcliffe, L., Batáry, P., Kormann, U., Báldi, A., Dicks, L., Herzon, I., Kleijn, D., Tryjanowski, P., Apostolova, I., Arlettaz, R., Aunins, A., Aviron, S., Balezentiene, L., Čierna-Plassmann, M., Fischer, C., Gabrielová, J., Halada, L., Hartel, T., Helm, A., Hristov, I., Jelaska, S., Jones, G., Kaligarič, M., Kamp, J., Klimek, S., Koorberg, P., Kovács-Hostyánszki, A., Kuemmerle, T., Leuschner, C., Lindborg, R., Loos, J., Maccherini, S., **Marja, R.**, Máthé, O., Paulini, I., Proença, V., Rey-Benayas, J., Sans, F.X., Seifert, C., Stalenga, J., Štrbenac, A., Timaeus, J., Török, P., van Swaay, C., Viik, E., Tscharntke, T. 2015. Harnessing the biodiversity value of Central and Eastern European farmland. *Diversity and Distributions*, 21: 722–730.
- Herzon, I., **Marja, R.**, Menshikova, S., Kondratyev, A., Le Viol, I. 2018. Can functional community indices enhance our understanding of the impact agricultural development on birds in Northwest Russia? *Agriculture, Ecosystems and Environment* 259: 53–60.
- Marja, R.**, Viik, E., Mänd, M., Phillips, J., Klein, A.M. Batáry, P. 2018. Crop rotation and agri-environment schemes determine bumblebee communities via flower resources. *Journal of Applied Ecology*, 55: 1714–1724.
- Moussy, C., Arlettaz, R., Copete, J.L., Dale, S., Dombrovski, V., Elts, J., Lorrillière, R., **Marja, R.**, Pasquet, E., Piha, M., Rakovic, M., Seimola, T., Selstam, G., Jiguet, F. 2018. The

genetic structure of the European breeding populations of a declining farmland bird, the ortolan bunting (*Emberiza hortulana*), reveals conservation priorities. *Conservation Genetics*, 19, 909–922.

Jiguet, F., Robert, A., Lorrillière, R., Hobson, K.A., Kardynal, K.J., Arlettaz, R., Bairlein, F., Belik, V., Bernardy, P., Copete, J.L., Czajkowski, M.A., Dale, S., Dombrovski, V., Ducros, D., Efrat, R., Elts, J., Ferrand, Y., **Marja, R.**, Minkevicius, S., Olsson, P., Pérez, M., Piha, M., Raković, M., Schmaljohann, H., Seimola, T., Selstam, G., Siblet, J.-P., Skierczynski, M., Sokolov, A., Sondell, J., Moussy, C. 2019. Unravelling migration connectivity reveals unsustainable hunting of the declining ortolan bunting. *Science Advances*, 5 (5).10.1126/sciadv.aau2642.

Marja, R., Kleijn, D., Tscharntke, T., Klein, A.-M., Frank, T., Batáry, P. 2019. Effectiveness of agri-environmental management on pollinators is moderated more by ecological contrast than by landscape structure or land-use intensity. *Ecology Letters*, 22: 1493–1500.

Publications in international peer-reviewed journals

Muljar, R., Viik, E., **Marja, R.**, Svilponis, E., Jõgar, K., Karise, R., Mänd, M. 2010. The effect of field size on the number of bumble bees. *Agronomy Research* 8: 357–360.

Elts, J., Tätte, K., **Marja, R.** 2015. What are the important landscape components for habitat selection of the ortolan bunting? *European Journal of Ecology* 1: 13–25.

Roy, H., Groom, Q., Adriaens, T. et al., 2018. Increasing understanding of alien species through citizen science (Alien-CS). *Research Ideas and Outcomes*, 4 (e31412), 1–43.10.3897/rio.4.e31412.

Publications in Estonian peer-reviewed journals

Elts, J., **Marja, R.** 2007. Rukkiräägu (*Crex crex*) loendused Karula rahvuspargis aastatel 2003 ja 2004 ning helisalvestisega peibutamise mõjust loendustulemustele. *Hirundo* 20: 54–65.

Marja, R. 2008. Pöllumajandusmaastiku linnustiku mitmekesisuse seosed maastikuindeksitega. *Hirundo* 21: 29–50.

Marja, R., Elts, J. 2014. Nurmkana (*Perdix perdix*) salkade suuruse ja elupaigakasutuse dünaamika: Eesti Ornitoloogiaühingu Aasta Lind 2013 projekti kokuvõte. *Hirundo* 27: 21–32.

Marja, R., Elts, J. 2014. Pöllulindude liigirikkuse ja arvukuse seosed kuivenduskraavide olemasolu ja mulla niiskusastmmega. *Hirundo*, 27(2), 1–13.

Marja, R., Elts, J., Tuvi, J., Phillips, J. 2015. Rukkiräägu (*Crex crex*) asustustiheduse elupaigalisest varieeruvusest Lahemaa rahvuspargis 2014. aastal. *Hirundo* 28: 43–52.

Marja, R., Elts, J. 2017. Turteltuvide (*Streptopelia turtur*) elupaigakasutuse ja käitumismustri kirjeldus 2017. aastal kogutud andmete põhjal. *Hirundo* 30: 46–56.

Marja, R., Elts, J. 2018. Kaelus-turteltuvi (*Streptopelia decaocto*) elupaigakasutus, käitumine ja tegutsemiskohad 2017. aastal. *Hirundo*, 31, 21–31.

Marja, R., Kuus, A., Kalamees, A. 2018. Soome lahe avamere lindude inventuuri tulemused seoses aastaaegade, mere sügavuse ja geograafilise pikkusega. *Hirundo*, 31, 32–48.

Marja, R., Nellis, R. 2018. Perioodil 1984–2017 pöllulindude arvukuse muutus Eestis ning selle seos pöllumajanduse ja kiskjatega. *Hirundo*, 31, 49–68.

Peer-reviewed abstract publications for international conferences

- Marja, R.**, Uuemaa, E., Mander, Ü., Elts, J., Truu, J. 2010. Relationships between bird fauna diversity and landscape metrics in agricultural landscape at different levels. 8th International Conference of the EBCC Bird Numbers 2010. Caceres, Spain. 22–26 March 2010.
- Muljar, R., Viik, E., **Marja, R.**, Švilponis, E., Jõgar, K., Karise, R., Mänd, M. 2010. Effect of field size on the abundance and species richness of bumble bees. IXth European Congress of Entomology, Budapest, Hungary. 22–27. August 2010.
- Marja, R.**, Elts, J. 2010. Farmland birds and agri-environment schemes in Estonia: bird monitoring results from 2006–2009. Seminar on European Learning Network on Functional AgroBiodiversity (ELN-FAB) in Baltic Sea Region. Rakvere, Estonia. 25–26 August 2010.
- Marja, R.**, Herzon, I. 2011. Farmland birds and drainage ditches in agricultural landscapes in Baltic countries: does a field type matter? Next generation insights into geosciences and ecology. Tartu, Estonia. 12–13 May 2011.
- Elts, J., **Marja, R.** 2011. Advancement of arrival of the Woodcock (*Scolopax rusticola*) and Common Snipe (*Gallinago gallinago*) to Estonia, 1923–2009: does weather play a role? 7th Woodcock & Snipe workshop. Saint Petersburg, Russia. 16–18 May 2011.
- Marja, R.**, Herzon, I., Rintala, J.N., Tiainen, J., Seimola, T. 2013. The importance of agricultural drainage ditches for farmland birds in the North-East of the EU: results of two studies „East meets West—transferring Conservation approaches between Eastern and Western European landscapes“. Göttingen, Germany. 13–15 February 2013.
- Marja, R.**, Herzon, I., Viik, E., Elts, J., Mänd, M., Tscharntke, T., Batáry, P. 2014. Which agri-environment scheme favor farmland birds in Estonia? In: Integrating ecological knowledge into nature conservation and ecosystem management: GfOe Annual Meeting 2014. Hildesheim, Germany. 8–12 September 2014.
- Marja, R.**, Tätte, K., Elts, J. 2015. Spatial characteristics of Orlolan Bunting *Emberiza hortulana* habitat selection. In: Programme and abstracts: 10th Conference of the European Ornithologists' Union. Badajoz, Spain. 24–28 September 2014.
- Marja, R.**, Elts, J. 2015. Eurasian curlew breeding success and habitat use in agricultural landscapes. In: International Wader Study Group Annual Conference 1-5 October 2015: (Eds.) Humphrey Sitters. Ásbrú, Reykjanessbær, Iceland 2–5 October 2015.
- Helm, A., Aavik, T., Ingerpuu, N., Ivask, M., Karise, R., Kasari, L., Kupper, T., **Marja, R.**, Meriste, M., Metsoja, J.-A., Neuenkamp, L., Oja, E., Tiitsaar, A. 2016. Monitoring changes in biodiversity patterns and in landscape structure during the large-scale grassland restoration in Estonia. Best practice in restoration. The 10th European Conference On Ecological Restoration August 22–26, 2016, Freising, Germany. Ed. Johannes Kollmann; Julia-Maria Hermann. Chair of Restoration Ecology, Technische Universität München, 241.
- Marja, R.**, Viik, E., Mänd, M., Phillips, J., Klein, A.M. Batáry, P. 2019. Crop rotations determine bumblebee communities via flower resources. In: Science meets practice: GfOe Annual Meeting 2019. Münster, Germany. 9–13 September 2019.
- Schwemmer, P., Bocher, P., Fort, J., Elts, J., **Marja, R.**, Garthe, S. 2019. GPS-tracking of migration and flight heights of Eurasian curlews (*Numenius arquata*) with respect to offshore windfarms. The 5th Conference on Wind energy and Wildlife impacts 2019. Stirling, Scotland, 27-30 August 2019. University of Stirling.

Publications in Estonian popular science journals

- Marja, R.**, Viik, E. 2009. Pöllulindude seire tulemustest Eestis. *Tiirutaja*. 6: 2.
- Marja, R.**, Elts, J. 2010. Kiviaiad–kultuuripärand ja elupaik. *Eesti Loodus*. 11: 50–52.
- Aua, J., **Marja, R.**, Elts, J. 2013. Nurmkana aasta kokuvõte. *Tiirutaja*. 27: 5.
- Marja, R.** 2014. Millist elupaika eelistavad pöllulinnud? *Eesti Loodus*. 6-7: 350–354.
- Marja, R.** Elts, J. 2014. Nurmkana (*Perdix perdix*) salkade suurus ja elupaikade kasutus. *Eesti Jahimees*. 11/12: 22 - 23.a
- Marja, R.** 2015. Kaeluspapagoi tunneb ennast Euroopas koduselt. *Eesti Loodus*. 2: 110 - 113.
- Marja, R.**, Elts, J. 2015. Suurkoovitaja, meie suurim kahlaja. *Eesti Loodus*. 3: 16–19.
- Marja, R.**, Elts, J., Tätte, K., Perm, T. 2015. Pöldtsiitsitajate arvukus on väga kiiresti vähenenud. *Eesti Loodus*. 11: 24–27.
- Marja, R.**, Elts, J., Tollington, S., Groombridge, J. 2016. Kaeluspapagoid Eestis? *Tiirutaja*. 32: 9.
- Marja, R.**, Elts, J. 2016. Eesti suurkoovitajate rändeteed. *Tiirutaja*. 34: 8.
- Marja, R.** 2017. 2017. Aasta lind kaelus-turteltuvi: vaid pool sajandit Eestis pesitsenud linnuliik. *Eesti Loodus*. 1: 12–17.
- Marja, R.**, Perm, T. 2017. Kaks turtlit: tuteltuvi ja kaelus-turteltuvi, aasta linnud 2017. *Eesti Jahimees*. 1: 16–18.
- Marja, R.** 2017. 2017. Elurikkus, väljasuremisvõlg ja teadlase roll ühiskonnas. Intervjuu taimeökoloogi Aveliina Helmiga. *Eesti Loodus*. 4: 40–45.
- Marja, R.** 2017. Turteltuvi on meie metsades üha haruldasem. *Eesti Loodus*. 5: 16–20.
- Marja, R.** 2017. Arktika, klimamuutused ja inimpuhholoogia ekstreemretkedel. Intervjuu geograafi Timo Paloga. *Eesti Loodus*. 11: 42–49.
- Marja, R.** 2018. Keemik, kellest sai loodusajakirjanik. Intervjuu Toomas Jüriadoga. *Eesti Loodus*. 8: 516–522.
- Marja, R.** 2018. Kuidas läheb meie rääkudel? *Eesti Loodus*. 8: 534–536.
- Marja, R.** 2018. Linnuvaatlusharrastus on arenenud ühiskonna tundemärk. Intervjuu Margus Otsaga. *Eesti Loodus*. 9: 618–622.
- Marja, R.** 2019. Kuidas mõjutavad pöllumajanduse keskkonnameetmed kimalaste arvukust? *Eesti Loodus*. 1: 55–59.

Book-monography

- Marja, R.** 2010. Aasta lind 2003 - harakas. Streimann, Katrin (Toim.). *Aasta linnud (lk 60 - 65)*. Tallinn: Menu Kirjastus
- Marja, R.**, Koorberg, P. 2010. Eesti levinumad pöllulinnud.
- Leibak, E., **Marja, R.**, Kuus, A. 2018. Eesti ornitogeograafiline liigestatus. - Rmt.: Linnuatlas. Eesti haudelindude levik ja arvukus. Eesti Ornitoloogiaühing, Tartu. pp 35-36.
- Marja, R.**, Elts, J. 2018. Kultuurmaastiku linnustik. - Rmt.: Linnuatlas. Eesti haudelindude levik ja arvukus. Eesti Ornitoloogiaühing, Tartu. pp 40-43.
- Marja, R.**, Kuus, A. 2018. Pöldvutt. - Rmt.: Linnuatlas. Eesti haudelindude levik ja arvukus. Eesti Ornitoloogiaühing, Tartu. pp 74-75.
- Marja, R.**, Kuus, A. 2018. Nurmkana. - Rmt.: Linnuatlas. Eesti haudelindude levik ja arvukus. Eesti Ornitoloogiaühing, Tartu. pp 76-77.

- Marja, R.** 2018. Harakas. - Rmt.: Linnuatlas. Eesti haudelindude levik ja arvukus. Eesti Ornitoloogiaühing, Tartu. pp 338-339.
- Marja, R.** 2018. Pöldlõoke. - Rmt.: Linnuatlas. Eesti haudelindude levik ja arvukus. Eesti Ornitoloogiaühing, Tartu. pp 366-367.
- Marja, R.** 2018. Sookiur. - Rmt.: Linnuatlas. Eesti haudelindude levik ja arvukus. Eesti Ornitoloogiaühing, Tartu. pp 470-471.

Reviewed manuscripts for the following journals:

Acta Oecologica, Acta Zoologica Academiae Scientiarum Hungaricae, Acta Zoologica Bulgarica, Agriculture, Ecosystems & Environment, Apidologie, Belgian Journal of Zoology, Biodiversity and Conservation, Biological Conservation, Bird Conservation International, Community Ecology, Conservation Letters, Diversity and Distributions, Ecological Engineering, Ethology Ecology & Evolution, European Journal of Ecology, Insect Conservation and Diversity, Journal of Applied Ecology, Journal of Environmental and Agricultural Sciences, Journal of Ornithology, Landscape and Urban Planning, Landscape Research, Oecologia, Regional Environmental Change.