Vogelwarte 63, 2025: 1–214
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Katalog für Schutz und Entwicklung der Vogelfreundlichen Freileitungen in Pelagonien (Nordmazedonien)

2. August 2023, Krusheani, Foto: B. Stumberger

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Stromschlag der Vögel

(Elektrokution)

Dokumentation:

28. Juli – 3. Avgust 2023

Katalog und Abbildungen: Borut Stumberger

Der Katalog zeigt 504 Strommasten in Pelagonien. Sie werden in der Reihenfolge der Erhebung dargestellt. Jedem Masten ist oben links eine eigene Identifikationsnummer (ID 1 - 504) zugeordnet. Unten rechts wird die elektrische Spannung angezeigt: niedrig <1 kV, mittel 1-60 kV, hoch >60 kV. Es sind fast ausschließlich Mittelspannungsmasten aufgeführt (n = 502). Dem abgebildeten Masten folgt – sofern dies bei der Begehenung festgestellt wurde – die Abbildung eines durch einen Stromschlag getöteten Vogels. Ihre lateinischen Namen, sowohl die durch Stromschläge getöteten als auch eineigen wenigen lebendigen, sind **unter** der Abbildung geschrieben.

1 Sarandinovo

2 Sarandinovo

3 Sarandinovo

4 Sarandinovo

35 kV

5 Sarandinovo

6 Sarandinovo

7 Sarandinovo

8 Sarandinovo

35 kV

9 Sarandinovo

9 Sarandinovo

10 Sarandinovo

Falco subbuteo nest

35 kV

11 Sarandinovo (35 kV)

12 Sarandinovo

12 Sarandinovo

13 Sarandinovo

10-20 kV

14 Sarandinovo

15 Sarandinovo

10-20 kV

16 Sarandinovo

17 Sarandinovo

18 Sarandinovo

19 Sarandinovo

10-20 kV

20 Sarandinovo

21 Sarandinovo

22 Sarandinovo

10-20 kV

23 Sarandinovo

10-20 kV

24 Sarandinovo

25 Sarandinovo

26 Sarandinovo

10-20 kV

27 Sarandinovo

28 Sarandinovo

29 Sarandinovo

30 Sarandinovo

10-20 kV

31 Sarandinovo (10-20 kV)

32 Sarandinovo (10-20 kV)

33 Sarandinovo

34 Sarandinovo

35 kV

35 Sarandinovo

Emberiza calandra

35 kV

36 Sarandinovo

37 Sarandinovo (35 kV)

38 Sarandinovo

39 Sarandinovo

10-20 kV

40 Sarandinovo

41 Sarandinovo

42 Sarandinovo

43 Sarandinovo

Pica pica

10-20 kV

43 Sarandinovo

Pica pica

10-20 kV

44 Sarandinovo

45 Sarandinovo

46 Sarandinovo

Asio flammeus

10-20 kV

47 Sarandinovo

48 Sarandinovo

49 Sarandinovo

50 Sarandinovo

10-20 kV

51 Sarandinovo

52 Sarandinovo

53 Sarandinovo

54 Sarandinovo

10-20 kV

55 Sarandinovo

56 Sarandinovo

57 Sarandinovo

58 Sarandinovo

10-20 kV

59 Sarandinovo

60 Sarandinovo

Ciconia ciconia

10-20 kV

61 Sarandinovo

61 Sarandinovo

62 Sarandinovo

Pica pica

10-20 kV

63 Sarandinovo

64 Sarandinovo

65 Sarandinovo

66 Sarandinovo

10-20 kV

67 Sarandinovo

68 Sarandinovo

69 Sarandinovo

35 kV

70 Sarandinovo

71 Sarandinovo

72 Sarandinovo

indet.

35 kV

73 Sarandinovo

74 Sarandinovo

75 Sarandinovo

76 Sarandinovo

No photo!

35 kV

77 Sarandinovo (35 kV)

78 Sarandinovo (35 kV)

79 – 104 Sarandinovo

10-20 kV

79 Sarandinovo

80 Sarandinovo

81 Sarandinovo

10-20 KV

82 Sarandinovo

83 Sarandinovo

84 Sarandinovo

85 Sarandinovo

10-20 kV

86 Sarandinovo

87 Sarandinovo

88 Sarandinovo

10-20 kV

89 Sarandinovo

90 Sarandinovo

90 Sarandinovo

Corvus corone cornix

10-20 kV

91 Sarandinovo

92 Sarandinovo

93 Sarandinovo

94 Sarandinovo

95 Sarandinovo

Buteo rufinus

10-20 kV

96 Sarandinovo

97 Sarandinovo

98 Sarandinovo

99 Sarandinovo

10-20 kV

99 Sarandinovo

100 Sarandinovo

10-20 kV

101 Sarandinovo

Corvus corone cornix

10-20 kV

102 Sarandinovo

103 Sarandinovo

104 Sarandinovo

10-20 kV

105 Zhitoshe

106 Zhitoshe

10-20 kV

107 Zhitoshe

108 Lokveni

109 Lokveni

10-20 kV

109 Lokveni

110 Lokveni (< 1 kV)

10-20 kV

111 – 139 Podvis

10-20 kV

111 Podvis

112 Podvis

113 Podvis

10-10 kV

113 Podvis

114 Podvis

115 Podvis *Ciconia ciconia feeding*

10-20 kV

115 Podvis

116 Podvis

117 Podvis

10-20 kV

118 Podvis

119 Podvis

120 Podvis

10-20 kV

121 Podvis

122 Podvis

123 Podvis

124 Podvis

10-20 kV

124 Podvis

125 Podvis

126 Podvis

10-20 kV

127 Podvis

128 Podvis

129 Podvis

130 Podvis

10-20 kV

131 Podvis

132 Podvis

132 Podvis

133 Podvis

10-20 kV

134 Podvis

135 Podvis

10-20 kV

136 – 148 Godivje

35 kV

136 Godivje

137 Godivje

137 Godivje

138 Godivje

35 kV

139 Godivje

140 Godivje

141 Godivje

35 kV

142 Godivje

143 Godivje

35 kV

144 Godivje

145 Godivje

35 kV

146 Godivje

147 Godivje

Falco naumanni sitting

35 kV

147 Godivje

Ciconia ciconia feeding

35 kV

148 Godivje

148 Godivje

Falco naumanni sitting

35 kV

149 Dolneni

150 Dolneni

10-20 KV

151 Dolneni

152 Dolneni

153 Dolneni

10-20 kV

154 Dolneni

155 Dolneni

156 Dolneni

10-20 kV

157 Dolneni

158 Dolneni

159 Dolneni

160 Dolneni

10-20 kV

161 Dolneni

162 Dolneni

Lanius minor

10-20 kV

163 Dolneni

164 Dolneni

165 Dolneni

166 Dolneni

10-20 kV

167 – 180 Berovtsi

35 kV

167 Berovtsi

168 Berovtsi

168 Berovtsi

Ciconia ciconia nest

35 kV

169 Berovtsi

35 kV

170 Berovtsi

Ciconia ciconia

35 kV

171 Berovtsi

172 Berovtsi

172 Berovtsi

173 Berovtsi *Ciconia ciconia* nest

35 kV

174 Berovtsi

175 Berovtsi

Pica pica

35 kV

176 Berovtsi

177 Berovtsi

178 Berovtsi

179 Berovtsi

35 kV

180 Berovtsi

181 Berovtsi

182 Berovtsi

35 kV

183 Berovtsi

183 Berovtsi

184 Berovtsi *Falco subbuteo* nest

35 kV

185 Topolchani (35 kV)

192 – 233 Topolchani (pylons on Fig. 192 – 194)

10-20 kV

186 Topolchani

187 Topolchani

188 Topolchani

10-20 kV

189 Topolchani

190 Topolchani

190 Topolchani

191 Topolchani

10-20 kV

192 Topolchani

Falco naumanni

10-20 kV

193 Topolchani

Pica pica

10-20 kV

194 Topolchani

Pica pica

10-20 kV

195 Topolchani

196 Topolchani

10-20 kV

197 Topolchani

Pica pica

10-20 kV

198 Topolchani

199 Topolchani

199 Topolchani

Falco naumanni

10-20 kV

200 Topolchani

200 Topolchani

201 Topolchani

Pica pica

10-20 kV

202 Topolchani

203 Topolchani

Pica pica

10-20kV

204 Topolchani

204 Topolchani

205 Topolchani

Lanius minor sputum balls

10-20 kV

206 Topolchani

207 Topolchani

208 Topolchani

209 Topolchani

10-20 kV

209 Topolchani

210 Topolchani

Sturnus vulgaris

10-20 kV

210 Topolchani

5 *Sturnus vulgaris*

211 Topolchani

10-20 kV

212 Topolchani

Falco tinnunculus

10-20 kV

213 Topolchani

214 Topolchani

215 Topolchani

216 Topolchani

10.29 kV

217 Topolchani

218 Topolchani

219 Topolchani

Pica pica

10-20 kV

220 Topolchani

Falco naumanni

10-20 kV

221 Topolchani (35 kV)

222 Topolchani

223 Topolchani

10-20 kV

224 Topolchani

225 Topolchani

226 Topolchani

10-20 kV

227 Topolchani

228 Topolchani

229 Topolchani *Coloeus monedula*

10-20 kV

230 Topolchani

10-20 kV

231 Topolchani

231 Topolchani

232 Topolchani

Falco naumanni

10-20 kV

233 Topolchani

Falco naumanni & Sturnus vulgaris

10-20 kV

234 Kanatlarci

235 Kanatlarci

Sturnus vulgaris

2 *Sturnus vulgaris*

10-20 kV

236 Kanatlarci

237 Kanatlarci

238 Kanatlarci

239 Kanatlarci

10-20 kV

240 Kanatlarci

241 Kanatlarci

242 Kanatlarci

Coloeus monedula & Pica pica

10-20 kV

243 Kanatlarci

Coloeus monedula

10-20 kV

244 Kanatlarci

245 Kanatlarci

3 *Sturnus vulgaris*

Perdix perdix resting in shadow

10-20 kV

246 Kanatlarci

247 Kanatlarci

248 Kanatlarci

3 *Sturnus vulgaris*

10-20 kV

249 Marul

250 Marul

251 Marul

Coloeus monedula

10-20 kV

252 Marul

250 – 252 Marul *Pica pica*

10-20 kV

253 Podmol

254 Podmol

255 Podmol

10-20 kV

255 Podmol

256 Podmol

257 Podmol

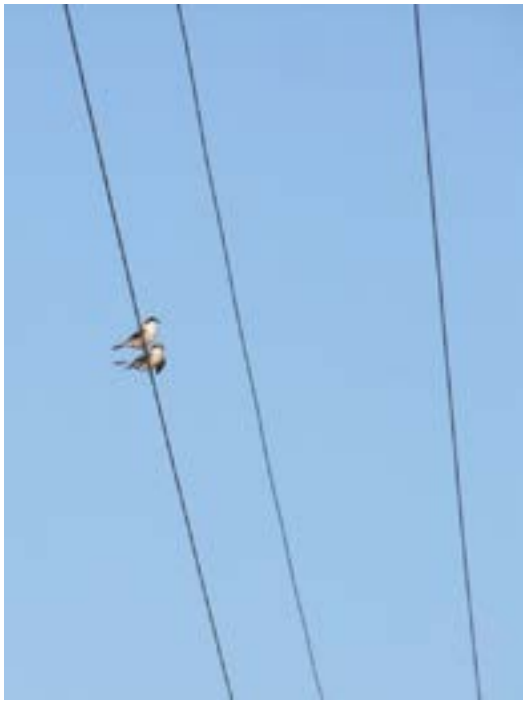
258 Podmol

10-20 kV

259 Podmol

260 Podmol

261 Podmol



Lanius minor feeding pullus

10-20 kV

262 Podmol

2 *Sturnus vulgaris*

10-20 kV

262 Podmol

2 *Sturnus vulgaris*

10-20 kV

263 Podmol

264 Podmol

10-20 kV

265 Podmol

266 Podmol

10-20 kV

267 Podmol

268 Podmol

269 Novo Lagovo

270 Novo Lagovo

10-20 kV

271 Galichani (<1 kV)

272 Galichani

10-20 kV

273 Kadino Selo

10-20 kV

274 Kadino Selo

275 Kadino Selo (< 1 kV)

Sturnus vulgaris

10-20 kV

276 Kadino Selo

277 Kadino Selo

278 Borotino

10-20 kV

279 Bela Crkva

280 Bela Crkva

281 Bela Crkva

10-20 kV

282 Bela Crkva

283 Bela Crkva

284 Bela Crkva

285 Bela Crkva

10-20 kV

286 Bela Crkva

287 Bela Crkva

288 Bela Crkva

10-20 kV

289 – 299 Vasherejca

289 Vasherejca

290 Vasherejca

10-20 kV

291 Vasherejca

292 Vasherejca

293 Vasherejca

10-20 kV

294 Vasherejca

35 kV

295 Vasherejca

296 Vasherejca

297 Vasherejca

Falco naumanni sitting on pylon

10-20 kV

297 Vasherejca

298 Vasherejca

Falco naumanni sitting on pylon

10-20 kV

299 Vasherejca

300 Vasherejca

301 Vasherejca

10-20 kV

302 – 310 Trojkrsti

Falco naumanni sitting on pylons and wires

10-20 kV

302 – 310 Trojkrsti

Falco naumanni sitting on wires

Sturnus vulgaris sitting on wires

10-20 kV

302 Trojkrsti

302 Trojkrsti

303 Trojkrsti

303 Trojkrsti

Falco naumanni sitting on pylon

10-20 kV

304 Trojkrsti

10-20 kV

305 Trojkrsti

306 Trojkrsti

307 Trojkrsti

308 Trojkrsti

10-20 kV

309 Trojkrsti

310 Trojkrsti

10-20 kV

311 Ropotovo

311 Ropotovo

312 Ropotovo

10-20 kV

313 Sekirtsi

314 Lazhani

No photo!

10-20 kV

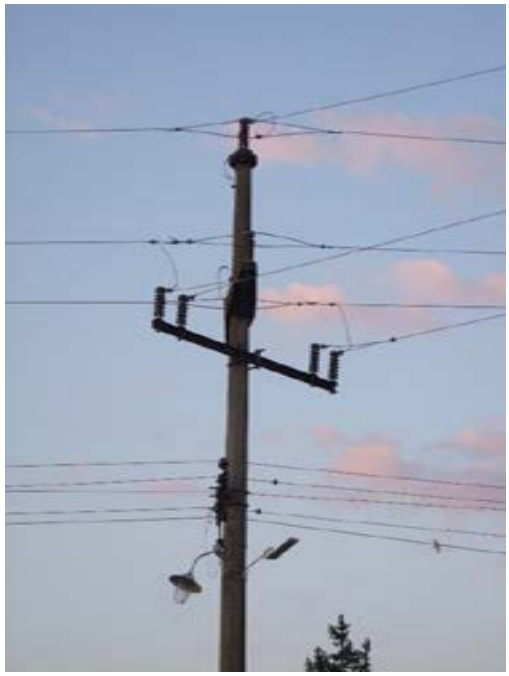
315 Noshpal

Ciconia ciconia

10-20 kV

316 Noshpal

317 Noshpal



10-20 kV

318 Noshpal

319 Noshpal

319 Noshpal

10-20 kV

320 – 326 Dobrushevo

320 Dobrushevo

321 Dobrushevo

322 Dobrushevo

323 Dobrushevo

324 Dobrushevo

325 Dobrushevo

10-20 kV

326 Dobrushevo

10-20 kV

327 Musintsi

328 Musintsi

329 Musintsi

Pica pica & Sturnus vulgaris

10-20 kV

330 Musintsi

331 Musintsi

332 Musintsi *Pica pica*

333 Musintsi

10-20 kV

334 Mojno

335 Mojno

10-20 kV

336 – 352 Musintsi

Falco naumanni & F. tinnunculus sitting on pylon and wires

10-20 kV

336 Musintsi

337 Musintsi

338 Musintsi

339 Musintsi

10-20 kV

340 Musintsi

341 Musintsi

342 Musintsi

343 Musintsi

10-20 kV

344 Musintsi

345 Musintsi

346 Musintsi

347 Musintsi

10-20 kV

348 Musintsi

349 Musintsi *Corvus corax* **350 Musintsi**

10-20 kV

351 Musintsi

352 Musintsi

10-20 kV

353 Dobrushevo

353 Dobrushevo

354 Dobrushevo

10-20 kV

355 Dobrushevo

356 Dobrushevo

357 Dobrushevo

10-20 kV

358 Trap

Ciconia ciconia

10-20 kV

359 Trap

360 Trap

Ciconia ciconia

10-20 kV

360 Trap

Ciconia ciconia, Pica pica and Columba livia forma domestica

10-20 kV

361 Trap

362 Trap

363 Trap

364 Trap

10-20 kV

365 Trap

366 Trap

Perdix perdix nest 30 July 2023

10-20 kV

367 Dedebalci

2 *Coloeus monedula*

10-20 kV

368 Dedeblaci

369 Dedebalci

370 Dedeblaci

371 Dedebalci

10-20 kV

372 Dedebalci

373 Dedebalci

374 Dedebalci

375 Dedebalci

10-20 kV

376 Dedebalci

377 Dedebalci

378 Dedebalci

379 Dedebalci

10-20 kV

380 Dedebalci

381 Dedebalci

382 Dedebalci

383 Dedebalci

10-20 kV

384 Dedebalci

385 Dedebalci

386 Dedebalci

387 Dedebalci

10-20 kV

388 Dedebalci

389 Dedebalci

10-20 kV

390 Dalbegovci

10-20 kV

391 Dolno Aglartsi

392 Gorno Aglartsi

393 Dobromiri

10-20 kV

394 Novaci

10-20 kV

395 Gneotino

3 *Ciconia ciconia*

10-20 kV

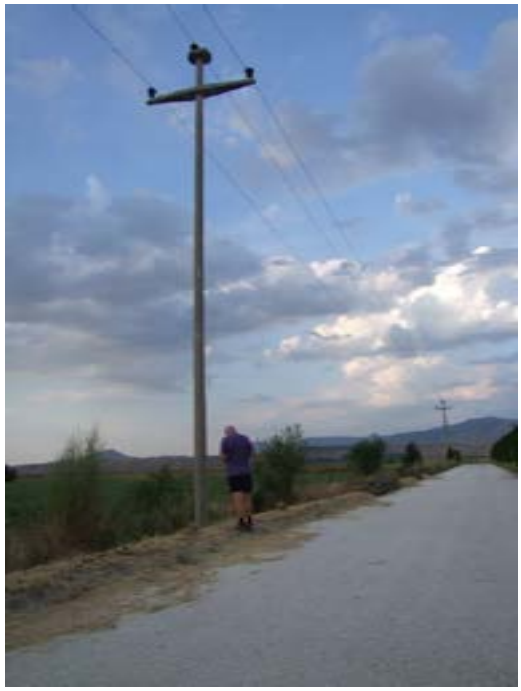
395 Gneotino

3 *Ciconia ciconia*

10-20 kV

396 Ribarci

397 Ribarci



398 Ribarci

399 Ribarci

10-20 kV

400 Ribarci

401 Ribarci

402 Ribarci

403 Ribarci

404 Ribarci

10-20 kV

405 Kravari

406 Kravari

2 *Pica pica*

Pica pica

10-20 kV

407 Zhabeni

10-20 kV

408 Sredno Egri

2 Sturnus vulgaris & Coloeus monedula

10-20 kV

409 Sredno Egri (35 kV)

410 Sredno Egri

411 Sredno Egri

412 Sredno Egri (35 kV)

10-20 kV

413 Sredno Egri

414 Sredno Egri

415 Sredno Egri

10-20 kV

416 Sredno Egri

417 Sredno Egri

10-20 kV

418 Sredno Egri

419 Sredno Egri

420 Sredno Egri

10-20 kV

421 Sredno Egri

10-20 kV

422 Sredno Egri

35 kV

423 Sredno Egri

424 Sredno Egri

425 Sredno Egri (35 kV)

10-20 kV

426 – 449 Sredno Egri

10-20 kV

426 Sredno Egri

427 Sredno Egri

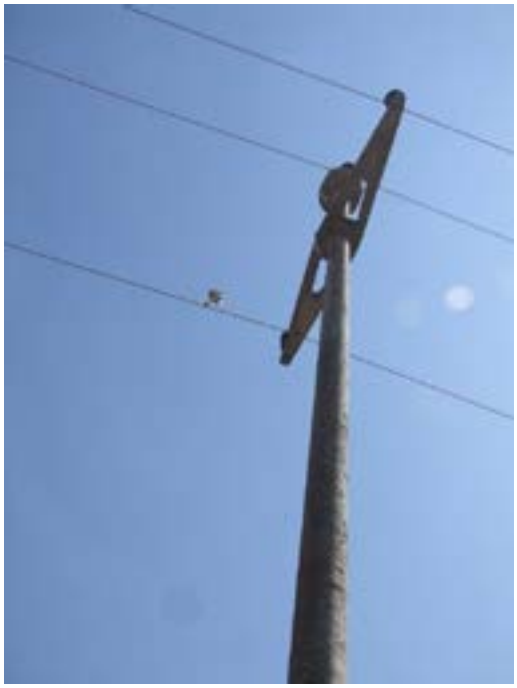
428 Sredno Egri

429 Sredno Egri

10-20 kV

430 Sredno Egri

431 Sredno Egri



Lanius minor sitting

10-20 kV

432 Sredno Egri

433 Sredno Egri

434 Sredno Egri

435 Sredno Egri

10-20 kV

436 Sredno Egri

437 Sredno Egri

438 Sredno Egri

10-20 kV

439 Sredno Egri

Meles melesthe, entrance to the badger's den

10-20 kV

440 Sredno Egri

441 Sredno Egri

442 Sredno Egri

443 Sredno Egri

10-20 kV

444 Sredno Egri

445 Sredno Egri

446 Sredno Egri

447 Sredno Egri

10-20 kV

448 Sredno Egri

449 Sredno Egri

10-20 kV

450 Bistrica

451 Optichari

452 Optichari

Pica pica

10-20 kV

453 Mogila

454 Mogila

455 Mogila

No photo!

10-20 kV

456 Radobor

457 Radobor

458 Radobor

10-20 kV

459 Radobor

460 Malo Konjari

461 – 465 Malo Konjari

10-20 kV

461 Malo Konjari

462 Malo Konjari

463 Malo Konjari

10-20 kV

464 Malo Konjari

465 Malo Konjari

10-20 kV

466 – 467 Golemo Konjari

466 Golemo Konjari

466 Golemo Konjari

467 Golemo Konjari

Pica pica & Streptopelia decaocto

10-20 kV

468 Golemo Konjari

469 Golemo Konjari **469 Golemo Konjari** **470 Golemo Konjari**

No photo!

10-20 kV

471 Golemo Konjari

472 Golemo Konjari

473 Slavej

474 Slavej

10-20 kV

475 Vrbjani

Ciconia ciconia

10-20 kV

476 Krusheani

10-20 kV

477 Krusheani

Ciconia ciconia

10-20 kV

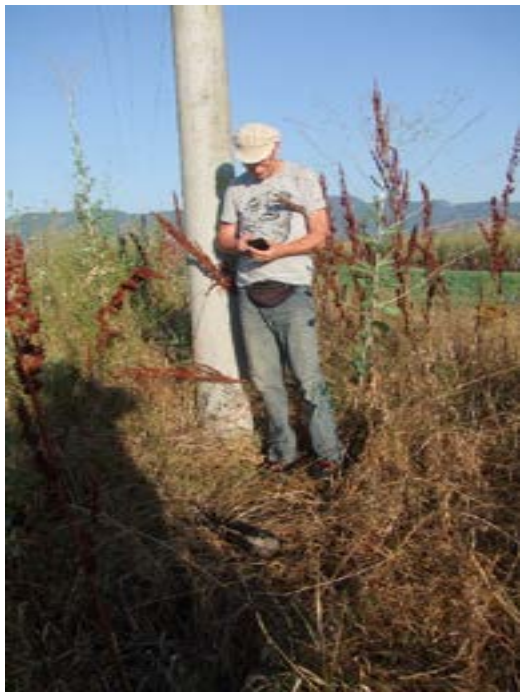
478 Krivogashtani

479 Krivogashtani

480 Krivogashtani

10-20 kV

481 Krivogashtani



Corvus corone cornix

10-20 kV

482 Krivogashtani

483 Krivogashtani

Ciconia ciconia feedig

484 Krivogashtani

Falco naumanni sitting

No photo!

10-20 kV

485 Krivogashtani

486 Krivogashtani

487 Krivogashtani

10-20 kV

488 Krivogashtani

489 Krivogashtani

490 Krivogashtani

10-20 kV

491 Krivogashtani

Falco naumanni

10-20 kV

492 Krivogashtani

493 Krivogashtani

494 Krivogashtani

495 Krivogashtani

10-20 kV

496 Krivogashtani

497 Krivogashtani

498 Krivogashtani

10-20 kV

499 Krivogashtani

Falco naumanni

10-20 kV

500 Krivogashtani

501 Krivogashtani

502 Krivogashtani

10-20 kV

503 Krivogashtani

Lanius minor feeding pullus

10-20 kV

504 Krivogashtani

10-20 kV