

Horse flies (Diptera: Tabanidae) of the Bílé Karpaty Protected Landscape Area and Biosphere Reserve (Czech Republic)

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JEŽEK J. & OMELKOVÁ M. 2012: Horse flies (Diptera: Tabanidae) of the Bílé Karpaty Protected Landscape Area and Biosphere Reserve (Czech Republic). In: MALENOVSKÝ I., KMENT P. & KONVIČKA O. (eds.): Species inventories of selected insect groups in the Bílé Karpaty Protected Landscape Area and Biosphere Reserve (Czech Republic). *Acta Musei Moraviae, Scientiae biologicae* (Brno) **96(2)** (2011): 803–817. – An account of the family Tabanidae in the Bílé Karpaty Protected Landscape Area and Biosphere Reserve (south-eastern Moravia, Czech Republic) is presented, with a total of 8 genera and 26 species of horse flies. A survey of 38 localities in 2005–2010 yielded records of 25 species. One species, *Tabanus sudeticus* Zeller, 1842, was collected from the area only in the distant past. Important among the records are *Haematopota bigoti* Gobert, 1881 and *H. ocelligera* (Kröber, 1922), both new for the fauna of the Czech Republic, and *Therioptectes gigas* (Herbst, 1787) which is classified as a vulnerable species in the national Red List of threatened invertebrates. A brief overview of distribution and ecology is provided for all the taxa recorded.

Key words. Diptera, Tabanidae, faunistics, biogeography, new records, species conservation, White Carpathians, Moravia, Czech Republic

Introduction

The family Tabanidae (horse flies) is a well-known group of haematophagous, dipterous insects of great economic importance. Females usually suck the blood of mammals, while both sexes drink water from pools and ponds in flight and often feed on nectar as well, mainly from umbellate plants. The eggs of Tabanidae are laid in compact masses, usually on the under-surface of leaves overhanging water or wet soil. Most of the larvae are predatory, aquatic, semi-aquatic or edaphic; mature larvae migrate to places of lower humidity and the pupa obtecta is unlikely to be submerged. For additional information on the biology of horse flies see CHVÁLA (1980) and CHVÁLA & JEŽEK (1997).

Altogether 3,500 species of horse flies are known worldwide; 541 of them occur in the Palaearctic Region, 213 in Europe, and 55 in the Czech Republic (50 in Bohemia, 48 in Moravia) (JEŽEK & BARTÁK 2005, CHVÁLA 2009). The Czech fauna has been addressed in detail in a monograph by CHVÁLA (1980). Further information on the distribution, ecology and biology of certain Czech species may be found in papers by ANDREEVA (1990), CHVÁLA (2007), LECLERCQ (1960, 1967), MOUCHA (1976), and OLSUFJEV (1977). Additional taxonomical and faunistic papers, regional identification guides, keys for the identification of larvae and accounts of species important from biogeographical and

nature conservation points of view were thoroughly reviewed by JEŽEK (1977, 1980) and JEŽEK *et al.* (2008).

In the past, only a few dipterists visited the Bílé Karpaty Mts. [=White Carpathians] to collect flies and published results were scarce (OMELKOVÁ *et al.* 2007, 2008, MALENOVSKÝ *et al.* 2012). Thus only four species of horse flies were known from the Bílé Karpaty Mts. prior to our study: *Therioplectes gigas*, collected in Javorník and Mt. Velká Javořina (MOUCHA & CHVÁLA 1958b, 1959; GUNÁROVÁ 1984; JEŽEK & JEŽKOVÁ 1978); *Tabanus spodopterus* published from Luhačovice (MOUCHA & CHVÁLA 1956, JEŽEK 1995), Javorník (MOUCHA & CHVÁLA 1958a) and Strážnice (JEŽEK 1995); *Tabanus sudeticus* known from Javorník (MOUCHA & CHVÁLA 1958a); and *Heptatoma pellucens* recorded from Luhačovice (JEŽEK 1995).

Our paper extends knowledge of the horse fly fauna of the Bílé Karpaty Protected Landscape Area and Biosphere Reserve (abbreviated to Bílé Karpaty PLA hereafter) by evaluating a large body of recently-collected material; this includes two species reported for the Czech Republic for the first time.

Material and methods

The study is based on 8,633 specimens of Tabanidae collected in the Bílé Karpaty PLA and some closely adjacent areas in 2005–2010. The data come from a total of 38 localities. A general overview of the whole area's natural history has been provided by KUČA *et al.* (1992), MACKOVČIN & JATIOVÁ (2002), JONGEPIEROVÁ (2008), and KONVIČKA *et al.* (2012). Collecting was mostly performed by means of Malaise traps (emptied at about three-week intervals; only the dates of sample removal are given for each record in the list of material examined), occasionally supplemented by yellow pan traps and sweep-netting. All material from traps, originally stored in alcohol, as well as dry material obtained by sweeping, was pinned for deposition in collections and further study (most of the material is deposited in the collection of the National Museum, Prague, with a few voucher specimens in the private collection of M. Omelková, Brno as well). The nomenclature in this paper follows CHVÁLA *et al.* (1972) and CHVÁLA (1988).

The following abbreviations are used throughout: NM – Nature Monument, NNR – National Nature Reserve, NR – Nature Reserve, PLA – Protected Landscape Area (all of these are the various categories and terms specified by the Czech system of legally protected natural areas); MT – Malaise trap, SW – sweep-netting, YPT – yellow pan traps; C – P. Chvojka leg., J – J. Ježek leg. & det., M – J. Macek leg. (e.g. JCM – J. Ježek, P. Chvojka & J. Macek leg., J. Ježek det.; CM – P. Chvojka & J. Macek leg., J. Ježek det.), O – M. Omelková leg. & det.; VU – vulnerable (a category specified by the Red List of threatened invertebrates of the Czech Republic, *cf.* JEŽEK & BARTÁK 2005).

List of collecting sites

Each entry in the list of collecting sites is arranged as follows: number of locality, name of the nearest village or town, local name of the collecting site or name of a small-

scale protected area (reserve) where appropriate, code of the field (in parentheses) in the faunistic and floristic grid mapping system of central Europe (EHRENDORFER & HAMANN 1965, ZELENÝ 1972, PRUNER & MÍKA 1996; each basic field divided into 16 subfields, cf. KONVIČKA *et al.* 2011), GPS coordinates (specified for the Malaise traps and small, well-defined localities only), altitude, and habitat.

1. Petrůvka, U Petrůvky NM (6872d4), 49°06'35"N 17°48'39"E, 430 m a.s.l.; meadow on slope above a forest brook.
2. Horní Lideč, Lačnovské rybníky ponds (6874a4), 49°11'01"N 18°02'20"E, 470 m a.s.l.; camping ground, dried gutters.
3. Valašské Klobouky, Javorůvky NR (6874c1), 49°08'04"N 18°01'56"E, 530 m a.s.l.; wet meadows, small forest brooks, spring areas, slope treeless tufa fens.
4. Poteč, Ploščiny NR (6874c2), 49°08'40"N 18°03'46"E, 630 m a.s.l.; slope spring area, wet meadows.
5. Valašské Klobouky, Bílé potoky NR (6874c3), 49°06'56"N 18°01'38"E, 420 m a.s.l.; meadows with slope spring areas, rills, forest edges.
6. Petrůvka, Kladenka brook (6972b2), 49°05'50"N 17°48'53"E, 390 m a.s.l.; alluvium, forest and meadows.
7. Nezdenice (6972d3), 245 m a.s.l.; brook, pastures and small forests.
8. Štítná nad Vláří-Popov, along Vlára river (6973b4), 310–320 m a.s.l.; pastures, meadows, fields, small forests.
9. Šanov, Rokytenka brook (6973c2), 415 m a.s.l.; pastures and small forests.
10. Brumov-Bylnice, Bylničky – Heriánův láz meadow and Bylnička brook (6974a4), 520 m a.s.l.; meadow spring area within beech forest, swampy soil.
11. Svatý Štěpán, Hluboče NM – Hlubočská stráž slope, Hlubočský potok brook (6974a4), 49°03'36"N 18°03'14"E, 430–490 m a.s.l.; slope spring area.
12. Sidonie, Sidonie NR (6974a4), 49°03'04"N 18°04'17"E, 450 m a.s.l.; beech forest.
13. Svatý Štěpán, Chladný vrch NM (6974c1), 49°01'34"N 18°00'32"E, 595 m a.s.l.; forest swamps, crib, small pond.
14. Horní Němčí, Dubníček (7071d2), 48°55'42"N 17°38'50"E, 478 m a.s.l.; wet pastures, spring areas, pastoral huts, cowpats.
15. Lopeník, Hrubý Mechnáč (7072d2), 48°56'27"N 17°48'04"E, 716 m a.s.l.; meadow spring areas and tufa fens, pastures.
16. Lopeník (7072d2), 675 m a.s.l.; meadow spring areas, brooks, pastures.
17. Žitková, Hutě NR (7073a2), 48°59'30"N 17°54'29"E, 460 m a.s.l.; wet meadows with scattered reeds, slope spring areas, decaying hay, brook.
18. Vyškovec, Drietomice brook – SE of the village (7073c1), 510 m a.s.l.; forest valley.
19. Radějov, Žerotín NM (7169b4), 48°51'44"N 17°19'42"E, 304 m a.s.l.; xerothermic meadow.
20. Kněždub, Čertoryje NNR – Járkovec brook (7170a4), 48°51'22"N 17°24'29"E, 320 m a.s.l.; shallow swampy valley, shrubs.
21. Kněždub, Čertoryje NNR (7170a4), 48°51'35"N 17°24'17"E, 340 m a.s.l.; meadows with scattered trees.
22. Kněždub, Čertoryje NNR – Radějovka brook (7170b3), 48°51'31"N 17°25'50"E, 355–360 m a.s.l.; alluvium.
23. Radějov, Kútky NR – Mandát brook (7170c2), 48°49'43"N 17°22'47"E, 350 m a.s.l.; small pond, forest edge.
24. Radějov, Kútky NR (7170c2), 48°50'05"N 17°23'05"E, 415 m a.s.l.; wet meadows, pastures (grazed by fallow deers).
25. Velká nad Veličkou, Zahrady pod Hájem NNR (7171a1), 48°53'04"N 17°31'59"E, 385 m a.s.l.; fragments of species-rich meadows, shrubs.
26. Javorník, Jazevčí NNR – left tributary of the Velička river (7171a4), 48°52'12"N 17°33'55"E, 360 m a.s.l.; brook, forest edge.

27. Javorník, Jazevčí NNR – floodplain lobe of the Velička river (7171a4), 360 m a.s.l.; winding river, forest edge.
28. Javorník, Jazevčí NNR (7171a4), 48°52'09"N 17°33'24"E, 415 m a.s.l.; species-rich meadows on slopes, small woods.
29. Nová Lhota, Hryzlácké Mlýny (7171b1), 48°53'10"N 17°36'08"E, 450 m a.s.l.; meadows and pastures with scattered trees.
30. Nová Lhota, Vápenky – left tributary of the Velička brook (7171b3), 48°52'16"N 17°36'58"E, 435 m a.s.l.; alluvium with shrubs, country cottage colony.
31. Nová Lhota, Vápenky, Javorina NNR – Vadovská (7171b4), 520–970 m a.s.l.; beech forest, forest glade, brook.
32. Javorník, Machová NR (7171c1), 48°49'37"N 17°31'41"E, 460 m a.s.l.; meadows.
33. Javorník, Machová NR – Rybnický potok brook (7171c1), 48°49'41"N 17°32'32"E, 400 m a.s.l.; alluvium.
34. Javorník, Filipovské údolí valley – between Liščí bouda hunting lodge and Megovka hostel (7171c2); brook, small bridge, swampy area in beech forest.
35. Javorník, Machová NR – Rybnický potok brook (7171c2), 48°49'59"N 17°32'05"E, 425 m a.s.l.; alluvium of forest stream, marshes.
36. Javorník, Machová NR (7171c3), 48°49'21"N 17°31'20"E, 445 m a.s.l.; species-rich meadows, forest edge.
37. Strání, Záhumenice NM (7172a1), 48°53'48"N 17°41'12"E, 460 m a.s.l.; forest brook.
38. Strání, Javořina NNR – peak (7172a3), 48°51'23"N 17°40'09"E, 935 m a.s.l.; mountain meadow.

Annotated list of species

All examined material for each species is listed; individual records are ordered according to the number of the collecting site. Each record is arranged as follows: name of the collecting site and its number (in parentheses), date(s) of collection(s), number of specimens, collecting method, and collector(s). Published data are cited including the name of the nearest village, town or mountain, and the corresponding basic field code number in the faunistic and floristic grid mapping system of central Europe in parentheses.

Atylotus rusticus (Linnaeus, 1767)

Material examined. Nezdenice (7), 27.vi.2006, 1 ♀, SW, J.

Comments. A common species, widely distributed throughout Europe and Siberia, present also in North Africa and Turkey. It is usually collected in agricultural landscapes.

Chrysops caecutiens (Linnaeus, 1758)

Material examined. Petrůvka, U Petrůvky NM (1), 16.vii. and 4.viii.2008, 2 ♀♀, MT, JCM. Valašské Klobouky, Javorůvky NR (3), 18.v.2009, 1 ♀, SW, J. Valašské Klobouky, Bílé potoky NR (5), 13.vii. and 31.vii.2006, 2 ♀♀, MT, JCM. Petrůvka, Kladenka brook (6), 4.viii. and 25.viii.2008, 1 ♂ 2 ♀♀, MT, JCM. Nezdenice (7), 27.vi.2006, 1 ♀, SW, J. Žitková, Hutě NR (17), 11.vii.2008, 1 ♂ 3 ♀♀, MT, JCM. Kněždub, Čertoryje NNR – Járkovec brook (20), 20.vi., 10.vii. and 31.vii.2006, 5 ♂♂ 7 ♀♀, MT, JCM. Kněždub, Čertoryje NNR (21), 29.v., 10.vii. and 31.vii.2006, 7 ♀♀; 21.viii.2006, 1 ♀ (f. *ludens* Loew, 1858); all MT, JCM. Kněždub, Čertoryje NNR – Radějovka brook (22), 14.vii. and 12.viii.2010, 8 ♀♀, MT, CM. Radějov, Kútky NR – Mandát brook (23), 15.vii.2008, 2 ♀♀, MT, JCM. Radějov, Kútky NR (24), 15.vii.2008, 1 ♀, MT, JCM. Velká nad Veličkou, Zahrady pod Hájem NNR (25), 13.vii. and 15.vii.2009, 2 ♀♀, SW, J and MT, JCM.

Horse flies (Diptera: Tabanidae)

Javorník, Jazevčí NNR (26), 5.viii. and 24.viii.2009, 5 ♀♀, MT, JCM. Javorník, Jazevčí NNR (28), 15.vii. and 16.vii., 5.viii.2009, 7 ♀♀, SW, J and MT, JCM. Nová Lhota, Hryzlácké Mlýny (29), 15.vii. and 4.viii.2009, 2 ♀♀, SW, J and MT, JCM. Nová Lhota, Vápenky (30), 22.vi., 15.vii. and 5.viii.2009, 5 ♀♀, MT, JCM. Javorník, Machová NR (32), 2.viii.2007 and 10.viii.2010, 3 ♀♀, SW, J and MT, CM. Javorník, Machová NR – Rybnický potok brook (33), 13.vii.2010, 14 ♀♀, MT, CM. Javorník, Machová NR – Rybnický potok brook (35), 28.v., 9.vii. and 2.viii.2007, 19 ♀♀, MT, JCM. Javorník, Machová NR (36), 18.v., 28.v., 9.vii., 2.viii., and 22.viii.2007, 16 ♀♀, MT, JCM. Strání, Záhumenice NM (37), 9.vii. and 12.viii.2010, 1 ♂ 2 ♀♀, MT, CM.

Comments. A Euro-Siberian species distributed from the Iberian Peninsula throughout Europe and the Mediterranean Region to the Russian Far East, China and Mongolia. Common in forest regions from lowlands to mountains. Its larvae live at the bottom of rills and brooks; the pupae may be found close to the surface in the soil of meandering streams.

Chrysops relictus Meigen, 1820

Material examined. Horní Lideč, Lačnovské rybníky ponds (2), 15.viii.2007, 2 ♀♀, SW, J.

Comments. A Euro-Siberian forest-steppe species. It has been reported from lowlands and hilly regions. The larvae live in lentic water of ponds, shallow water reservoirs with soiled bottom or in muddy grounds of slow-flowing irrigation canals, brooks and rivers.

Chrysops viduatus (Fabricius, 1794)

Material examined. Radějov, Žerotín NM (19), 5.viii.2008, 1 ♂, MT, JCM. Kněždub, Čertoryje NNR – Járkovec brook (20), 31.vii.2006, 1 ♂, MT, JCM. Radějov, Kútky NR – Mandát brook (23), 26.vi. and 5.viii.2008, 1 ♂ 1 ♀, MT, JCM. Javorník, Jazevčí NNR (26), 25.vi.2009, 1 ♂, MT, JCM. Javorník, Machová NR – Rybnický potok brook (35), 18.v. and 9.vii.2007, 2 ♂♂ 1 ♀, MT, JCM.

Comments. Widely distributed from Europe to western Siberia, including some Mediterranean islands. The immature stages develop in swampy and marshy habitats (e.g. alder forests) in various landscapes.

Haematopota bigoti Gobert, 1881

Material examined. Poteč, Ploščiny NR (4), 31.vii.2006, 1 ♀, MT, JCM. Javorník, Jazevčí NNR (26), 15.vii.2009, 1 ♀, MT, JCM. Javorník, Machová NR – Rybnický potok brook (35), 2.viii.2007, 1 ♀, MT, JCM. Javorník, Machová NR (36), 2.viii.2007, 3 ♀♀, MT, JCM.

Comments. Primarily a southern European species, with the northern limit of distribution reaching Hungary and Slovakia; present also in North Africa and isolated localities in England, Germany, Poland, Denmark, and Sweden. Recorded here for the first time for the Czech Republic. Biology unknown.

Haematopota crassicornis Wahlberg, 1848

Material examined. Poteč, Ploščiny NR (4), 13.vii.2006, 1 ♂, MT, JCM. Valašské Klobouky, Bílé potoky NR (5), 13.vii.2006, 1 ♀, MT, JCM. Žitková, Hutě NR (17), 25.vi.2006, 1 ♀, MT, O. Kněždub, Čertoryje NNR – Járkovec brook (20), 10.vii.2006, 1 ♀, MT, JCM. Javorník, Jazevčí NNR (26), 5.viii.2009, 1 ♀, MT, JCM.

Javorník, Machová NR – Rybnický potok brook (35), 28.v.2007, 1 ♀, MT, JCM. Javorník, Machová NR (36), 28.v.2007, 3 ♀♀, MT, JCM.

Comments. A forest species, widely distributed throughout Europe eastwards to the Ural Mts. and western Siberia. The larvae were found in muddy banks of ponds and lakes, swampy forests and small meandering rivers (JEŽEK 1971).

***Haematopota italica* Meigen, 1804**

Material examined. Poteč, Ploščíny NR (4), 13.vii.2006, 1 ♀, MT, JCM. Valašské Klobouky, Bílé potoky NR (5), 23.vi. and 31.vii.2006, 5 ♀♀, MT, JCM. Žitková, Hutě NR (17), 21.viii.2007, 1 ♀, MT, JCM.

Comments. A European species distributed from the Iberian Peninsula, the North Sea coast and Sweden to the Ural Mts., Caspian Sea and Turkey. Its larvae were described by FOLCO (1934). The habitats of the immature stages are probably the same as given for the other *Haematopota* species listed in this paper.

***Haematopota ocelligera* (Kröber, 1922)**

Material examined. Žitková, Hutě NR (17), 29.v.2007, 1 ♀, MT, JCM.

Comments. A southern European species distributed from Spain to Turkey, also known from North Africa. It is recorded here for the first time for the Czech Republic. The only known locality in the Bílé Karpaty Mts. lies at the northern tip of an extensive range. Biology unknown.

***Haematopota pluvialis* (Linnaeus, 1758)**

Material examined. Petrůvka, U Petrůvky NM (1), 23.vi., 16.vii., 4.viii., 25.viii. and 23.ix.2008, 6 ♂♂ 74 ♀♀, MT, JCM. Poteč, Ploščíny NR (4), 22.vi., 13.vii., 31.vii. and 23.viii.2006, 94 ♂♂ 192 ♀♀, MT, JCM. Valašské Klobouky, Bílé potoky NR (5), 13.vii., 31.vii. and 23.viii.2006, 12 ♂♂ 357 ♀♀, MT, JCM; 19.vii.2006, 7 ♀♀, MT, O. Petrůvka, Kladenka brook (6), 16.vii., 4.viii. and 25.viii.2008, 9 ♀♀, MT, JCM. Nezenice (7), 27.vi.2006, 5 ♀♀, SW, J. Sidonie, Sidonie NR (12), 5.vii.2010, 1 ♀, MT, CM. Svatý Štěpán, Chladný vrch NM (13), 11.viii. and 8.ix.2010, 3 ♀♀, MT, CM. Lopeník, Hrubý Mechnáč (15), 3.vii., 19.vii. and 23.viii.2006, 1 ♂ 2 ♀♀, MT, O. Žitková, Hutě NR (17), 17.vi., 19.vi., 31.vii. and 21.viii.2007, 11.vii.2008, 5 ♂♂ 167 ♀♀, MT, JCM; 25.vi.2006, 2 ♀♀, MT, O. Radějov, Žerotín NM (19), 14.vii.2008, 1 ♀, MT, JCM. Kněždub, Čertoryje NNR – Járkovec brook (20), 20.vi., 10.vii., 31.vii. and 31.viii.2006, 11 ♂♂ 531 ♀♀, MT, JCM. Kněždub, Čertoryje NNR (21), 20.vi., 10.vii., 31.vii. and 21.viii.2006, 17 ♂♂ 77 ♀♀, MT, JCM. Kněždub, Čertoryje NNR – Radějovka brook (22), 14.vii. and 12.viii.2010, 5 ♂♂ 35 ♀♀, MT, CM. Radějov, Kútky NR – Mandát brook (23), 15.vii. and 26.viii.2008, 11 ♀♀, MT, JCM. Radějov, Kútky NR (24), 26.vi. and 15.vii.2008, 1 ♂ 15 ♀♀, MT, JCM. Velká nad Veličkou, Zahrady pod Hájem NNR (25), 25.vi. and 15.vii.2009, 6 ♀♀, MT, JCM. Javorník, Jazevčí NNR (26), 25.vi., 15.vii., 5.viii. and 24.viii.2009, 2 ♂♂ 106 ♀♀, MT, JCM. Javorník, Jazevčí NNR (28), 25.vi., 15.vii., 5.viii. and 24.viii.2009, 2 ♂♂ 36 ♀♀, MT, JCM. Nová Lhota, Hryzlácké Mlýny (29), 15.vii., 4.viii., 24.viii. and 26.viii.2009, 1 ♂ 16 ♀♀, SW, J, MT, JCM. Nová Lhota, Vápenky (30), 15.vii. and 5.viii.2009, 15 ♀♀, MT, JCM. Javorník, Machová NR (32), 13.vii., 10.viii. and 7.ix.2010, 3 ♂♂ 11 ♀♀, MT, CM. Javorník, Machová NR – Rybnický potok brook (33), 3.vii., 13.vii., 10.viii. and 7.ix.2010, 6 ♂♂ 80 ♀♀, MT, CM. Javorník, Machová NR – Rybnický potok brook (35), 18.v., 9.vii., 2.viii. and 22.viii.2007, 8 ♂♂ 418 ♀♀, MT, JCM. Javorník, Machová NR (36), 18.v., 9.vii., 2.viii., 22.viii. and 10.ix.2007, 16.vii.2009, 178 ♂♂ 1177 ♀♀, SW, J and MT, JCM. Strání, Záhumenice NM (37), 9.vii. and 12.viii.2010, 11 ♂♂ 51 ♀♀, MT, CM.

Comments. A widely distributed species, known from whole Europe eastwards to eastern Siberia, Tien-Shan and China. It is supposed to be a vector of tularemia and anthrax. The larvae were found even far from the water in meadows, pastures, and spoil dumps of open-cast coal mines.

***Haematopota scutellata scutellata* (Olsufjev, Moucha et Chvála, 1964)**

Material examined. Poteč, Ploščiny NR (4), 31.vii.2006, 1 ♀, MT, JCM. Valašské Klobouky, Bílé potoky NR (5), 31.vii.2006, 9 ♀♀, MT, JCM; 19.vii.2006, 1 ♀, MT, O. Petrůvka, Kladenka brook (6), 16.vii. and 4.viii.2008, 2 ♂♂ 2 ♀♀, MT, JCM. Sidonie, Sidonie NR (12), 11.viii.2010, 2 ♀♀, MT, CM. Svatý Štěpán, Chladný vrch NM (13), 8.ix.2010, 1 ♀, MT, CM. Žitková, Hutě NR (17), 31.vii.2007, 1 ♀, MT, JCM. Kněždub, Čertoryje NNR – Járkovec brook (20), 31.vii. and 31.viii.2006, 11 ♀♀, MT, JCM. Radějov, Kútky NR – Mandát brook (23), 15.vii. and 5.viii.2008, 2 ♀♀, MT, JCM. Radějov, Kútky NR (24), 15.vii. and 5.viii.2008, 2 ♂♂, MT, JCM. Javorník, Jazevčí NNR (26), 5.viii.2009, 1 ♀, MT, JCM. Nová Lhota, Vápenky, Javorina NNR – Vadovská (31), 14.vii.2009, 1 ♀, SW, J. Javorník, Machová NR – Rybnický potok brook (35), 9.vii., 2.viii. and 22.viii.2007, 10.viii.2010, 2 ♂♂ 59 ♀♀, MT, JCM. Javorník, Machová NR (36), 2.viii. and 22.viii.2007, 24 ♀♀, MT, JCM. Strání, Záhumenice NM (37), 9.vii., 12.viii. and 9.ix.2010, 4 ♀♀, MT, CM.

Comments. A European subspecies, discontinuously distributed from Portugal through central Europe eastwards as far as to the Caspian Sea. The larvae inhabit the littoral zone of small forest water reservoirs and meandering streams at higher altitudes, and swamps with tussocks of sedges and rushes (*Carex*, *Juncus* and *Scirpus* spp.).

***Haematopota subcylindrica* Pandellé, 1883**

Material examined. Petrůvka, U Petrůvky NM (1), 16.vii.2008, 1 ♀, MT, JCM. Poteč, Ploščiny NR (4), 13.vii. and 31.vii.2006, 4 ♀♀, MT, JCM. Horní Němčí, Dubníček (14), 28.vi.2006, 1 ♀, SW, J. Kněždub, Čertoryje NNR – Járkovec brook (20), 20.vi. and 10.vii.2006, 2 ♀♀, MT, JCM. Javorník, Machová NR (36), 18.v.2007, 1 ♀, MT, JCM. Strání, Záhumenice NM (37), 9.vii.2010, 1 ♀, MT, CM.

Comments. A Euro-Siberian species, with records scattered over a wide area extending from the Iberian Peninsula and the British Isles through southern Sweden, central Europe, northern Balkans, Caucasus, Kazakhstan and Tien-Shan to eastern Siberia; also known from Turkey and Iran. The larvae inhabit similar habitats as those of the foregoing species.

***Heptatoma pellucens pellucens* (Fabricius, 1776)**

Published records. JEŽEK (1995) and OMELKOVÁ *et al.* (2008): Luhačovice (6872/6972).

Material examined. Žitková, Hutě NR (17), 11.vii.2008, 1 ♀, MT, JCM. Kněždub, Čertoryje NNR – Radějovka brook (22), 14.vii.2010, 1 ♀, MT, CM. Velká nad Veličkou, Zahrady pod Hájem NNR (25), 24.viii.2009, 1 ♀, SW, J. Javorník, Jazevčí NNR (27), 26.viii.2009, 1 ♀, SW, J. Javorník, Machová NR – Rybnický potok brook (35), 9.vii.2007, 1 ♀, MT, JCM.

Comments. A European and western Siberian subspecies, distributed northwards up to the boreal forest zone near the Arctic Circle in Russia and southwards to the Alps, the Balkans and Ukraine. Its larvae develop in the littoral of forest pools and water reservoirs in parks; they are, however, absent from high altitudes (CHVÁLA & JEŽEK 1997).

***Hybomitra bimaculata* (Macquart, 1826)**

Material examined. Nová Lhota, Hryzlácké Mlýny (29), 3.vi.2009, 1 ♀, MT, JCM. Javorník, Machová NR (36), 9.vii.2007, 1 ♀, MT, JCM.

Comments. Widespread in the Palaearctic Region. The larvae were found in the littoral of ponds, lakes, artificial water reservoirs, slow-flowing drainage canals, forest swamps, and wet meadows.

***Hybomitra ciureai* (Séguy, 1937)**

Material examined. Kněždub, Čertoryje NNR (21), 20.vi.2006, 1 ♀, MT, JCM.

Comments. A Euro-Siberian, widely distributed forest-steppe species. Its larvae occur in the littoral of forest water reservoirs, muddy meandering rivers and inundated wet meadows (CHVÁLA & JEŽEK 1969).

***Hybomitra distinguenda* (Verrall, 1909)**

Material examined. Petrůvka, U Petrůvky NM (1), 16.vii.2008, 1 ♀, MT, JCM. Poteč, Ploščiny NR (4), 13.vii. and 31.vii.2006, 2 ♀♀, MT, JCM. Valašské Kloubouky, Bílé potoky NR (5), 23.vi.2006, 1 ♀, MT, JCM. Petrůvka, Kladenka brook (6), 23.vi.2008, 1 ♀, MT, JCM. Nezdenice (7), 27.vi.2006, 1 ♀, SW, J. Kněždub, Čertoryje NNR – Járkovec brook (20), 10.vii. and 31.vii.2006, 4 ♀♀, MT, JCM. Kněždub, Čertoryje NNR – Radějovka brook (22), 12.viii.2010, 1 ♀, MT, CM. Radějov, Kútky NR – Mandát brook (23), 15.vii.2008, 1 ♀, MT, JCM. Radějov, Kútky NR (24), 26.vi.2008, 1 ♀, MT, JCM. Javorník, Jazevčí NNR (26), 15.vii.2009, 2 ♀♀, MT, JCM. Javorník, Jazevčí NNR (28), 16.vii.2009, 1 ♀, SW, J. Nová Lhota, Hryzlácké Mlýny (29), 15.vii.2009, 1 ♀, SW, J. Nová Lhota, Vápenky, Javorina NNR – Vadovská (31), 14.vii.2009, 1 ♀, SW, J. Javorník, Machová NR – Rybnický potok brook (33), 13.vii.2010, 1 ♀, MT, CM. Javorník, Machová NR – Rybnický potok brook (35), 9.vii.2007, 3 ♀♀, MT, JCM. Javorník, Machová NR (36), 18.v., 9.vii. and 2.viii.2007, 13 ♀♀, MT, JCM. Strání, Javorina NNR – peak (38), 23.vi. and 15.vii.2009, 3 ♀♀, MT, JCM.

Comments. A widely distributed Palaearctic forest species (JEŽEK 1995). Its larvae develop in the littoral zone of forest ponds, floating peat moss and peaty lake margins, and marshy swamps in lowlands and hilly regions.

***Hybomitra micans* (Meigen, 1804)**

Material examined. Valašské Klobouky, Bílé potoky NR (5), 23.vi.2006, 1 ♀, MT, JCM.

Comments. A European species. Its immature stages are mostly found in forest habitats (marshes and peat bogs) from lowlands to mountains.

***Hybomitra tropica* (Linnaeus, 1758)**

Material examined. Radějov, Kútky NR – Mandát brook (23), 4.vi.2008, 1 ♀, MT, JCM.

Comments. A European species. The larvae were found in the littoral zone of forest water reservoirs or streams, and in swamps and peat bogs.

***Silvius alpinus* (Scopoli, 1763)**

Material examined. Valašské Klobouky, Bílé potoky NR (5), 31.vii.2006, 1 ♂, MT, JCM. Petrůvka, Kladenka brook (6), 4.viii.2008, 1 ♀, MT, JCM. Kněždub, Čertoryje NNR (21), 31.vii.2006, 1 ♀, MT, JCM. Radějov, Kútky NR – Mandát brook (23), 15.vii.2008, 1 ♀, MT, JCM. Nová Lhota, Hryzlácké Mlýny (29), 15.vii.2009, 1 ♀, SW, J.

Comments. Distributed in southern and central Europe, Ural, Caucasus and Turkey; localities published from North Africa still have to be verified. Always collected in low numbers. The larvae live in small muddy rivers, springs, banks of water reservoirs, and alluvial plant and wood deposits.

***Tabanus autumnalis* Linnaeus, 1761**

Material examined. Poteč, Ploščiny NR (4), 13.vii.2006, 1 ♂, MT, JCM. Kněždub, Čertoryje NNR – Járkovec brook (20), 29.v. and 10.vii.2006, 3 ♀♀, MT, JCM. Kněždub, Čertoryje NNR (21), 10.vii.2006, 2 ♀♀, MT, JCM. Radějov, Kútky NR – Mandát brook (23), 26.viii.2008, 1 ♀, MT, JCM. Javorník, Jazevčí NNR (26), 5.viii.2009, 1 ♀, MT, JCM. Javorník, Machová NR (36), 18.v.2007, 1 ♀, MT, JCM.

Comments. Widely distributed in the Palaearctic region, rarely collected also at higher altitudes in mountains. The larvae were found in muddy littoral of ponds, lakes and large artificial water reservoirs; the life cycle may take up to two years.

***Tabanus bromius* Linnaeus, 1758**

Material examined. Petrůvka, U Petrůvky NM (1), 16.vii. and 4.viii.2008, 3 ♀♀, MT, JCM. Poteč, Ploščiny NR (4), 13.vii., 31.vii., 23.viii. and 20.ix.2006, 22 ♂♂ 24 ♀♀, MT, JCM. Valašské Klobouky, Bílé potoky NR (5), 23.vi., 13.vii., 31.vii., 23.viii.2006, 147 ♂♂ 42 ♀♀, MT, JCM. Petrůvka, Kladenka brook (6), 23.vi., 16.vii., 4.viii. and 25.viii.2008, 2 ♂♂ 42 ♀♀, MT, JCM. Nezdenice (7), 27.vi.2006, 21 ♀♀, SW, J. Štítná nad Vláří-Popov (8), 21.vi.2005, 90 ♀♀, SW, J. Brumov-Bylnice, Bylničky (10), 21.v.2009, 1 ♀, SW, J; Svatý Štěpán, Hluboče NM (11), 18.vi.2008, 1 ♀, SW, J. Sidonie, Sidonie NR (12), 11.viii.2010, 1 ♀, MT, CM. Svatý Štěpán, Chladný vrch NM (13), 4.vii. and 11.viii.2010, 1 ♂ 7 ♀♀, MT, CM. Horní Němčí, Dubníček (14), 28.vi.2006, 7 ♀♀, SW, J. Lopeník (16), 7.viii.2008, 6 ♀♀, SW, J. Žitková, Hutě NR (17), 31.vii.2007 and 11.vii.2008, 3 ♀♀, MT, JCM. Radějov, Žerotín NM (19), 5.viii.2008, 1 ♀, MT, JCM. Kněždub, Čertoryje NNR – Járkovec brook (20), 20.vi., 10.vii., 31.vii., 31.viii. and 18.ix.2006, 361 ♂♂ 1468 ♀♀, MT, JCM. Kněždub, Čertoryje NNR (21), 20.vi., 10.vii., 31.vii., 21.viii. and 18.ix.2006, 45 ♂♂ 258 ♀♀, MT, JCM. Kněždub, Čertoryje NNR – Radějovka brook (22), 14.vii., 12.viii. and 9.ix.2010, 7 ♂♂ 183 ♀♀, MT, CM. Radějov, Kútky NR – Mandát brook (23), 15.vii., 5.viii. and 26.viii.2008, 13 ♀♀, MT, JCM. Radějov, Kútky NR (24), 26.vi., 15.vii. and 5.viii.2008, 2 ♂♂ 33 ♀♀, MT, JCM. Velká nad Veličkou, Zahrady pod Hájem NNR (25), 13.vii., 15.vii., 6.viii. and 24.viii.2009, 3 ♂♂ 17 ♀♀, SW, J, MT, JCM. Javorník, Jazevčí NNR (26), 25.vi., 15.vii., 5.viii., 24.viii. and 14.ix.2009, 44 ♂♂ 60 ♀♀, MT, JCM. Javorník, Jazevčí NNR (27), 26.viii.2009, 6 ♀♀, SW, J. Javorník, Jazevčí NNR (28), 25.vi., 15.vii., 16.vii., 5.viii., 24.viii. and 14.ix.2009, 12 ♂♂ 110 ♀♀, SW, J, MT, JCM. Nová Lhota, Hryzlácké Mlýny (29), 15.vii., 4.viii. and 26.viii.2009, 1 ♂ 135 ♀♀, SW, J, MT, JCM. Nová Lhota, Vápenky (30), 22.vi.2009, 1 ♀, MT, JCM. Nová Lhota, Vápenky, Javorina NNR – Vadovská (31), 14.vii.2009, 39 ♀♀, SW, J. Javorník, Machová NR (32), 13.vii. and 10.viii.2010, 1 ♂ 4 ♀♀, MT, CM. Javorník, Machová NR – Rybnický potok brook (33), 3.vii., 13.vii., 10.viii.2010, 2 ♂♂ 42 ♀♀, MT, CM. Javorník, Filipovské údolí (34), 1.viii.2007, 1 ♀, SW, J. Javorník, Machová NR – Rybnický potok brook (35), 18.v., 9.vii., 2.viii. and 22.viii.2007, 3 ♂♂ 54 ♀♀, MT, JCM. Javorník, Machová NR (36), 18.v., 9.vii., 2.viii., 22.viii., 10.ix.2007, 256 ♂♂ 800 ♀♀, SW, J, MT, JCM. Strání, Záhumenice NM (37), 9.vii., 12.viii. and 9.ix.2010, 35 ♂♂ 71 ♀♀, MT, CM. Strání, Javorina NNR – peak (38), 23.vi., 15.vii., 5.viii. and 24.viii.2009, 18 ♀♀, MT, JCM.

Comments. A widely distributed European and western Siberian forest and steppe species, collected at various altitudes. It is supposed to be a vector of tularemia, anthrax and trypanosomiasis. The larvae were found in the littoral zone of water reservoirs and banks of brooks and small rivers, but also far from the water in meadows and pastures.

***Tabanus cordiger* Meigen, 1820**

Material examined. Valašské Klobouky, Bílé potoky NR (5), 13.vii.2006, 1 ♂, MT, JCM. Radějov, Žerotín NM (19), 14.vii.2008, 1 ♀, MT, JCM. Kněždub, Čertoryje NNR – Járkovec brook (20), 29.v., 20.vi., 10.vii. and 31.vii.2006, 5 ♂♂ 9 ♀♀, MT, JCM. Kněždub, Čertoryje NNR (21), 29.v., 20.vi., 10.vii. and 31.vii.2006, 3 ♂♂ 7 ♀♀, MT, JCM. Radějov, Kútky NR (24), 26.vi. and 15.vii.2008, 2 ♀♀, MT, JCM. Javorník, Jazevčí NNR (26), 25.vi.2009, 1 ♀, MT, JCM. Nová Lhota, Vápenky (30), 3.vi.2009, 1 ♀, MT, JCM. Javorník, Machová NR – Rybnický potok brook (33), 13.vii.2010, 1 ♀, MT, CM. Javorník, Machová NR (36), 18.v., 28.v., 18.vi., 9.vii. and 2.viii.2007, 4 ♂♂ 6 ♀♀, MT, JCM. Strání, Záhumenice NM (37), 9.vii.2010, 1 ♀, MT, CM. Strání, Javorina NNR – peak (38), 24.viii.2009, 1 ♂, MT, JCM.

Comments. Widely distributed in Europe, Canary Islands, North Africa, Caucasus, and the Middle East. The reophilic larvae may be found among emergent herbaceous vegetation of small rivers and below stones at the bottom of streams, mostly preferring places with sandy banks. The life cycle takes up to two years.

***Tabanus glaucopsis* Meigen, 1820**

Material examined. Valašské Klobouky, Bílé potoky NR (5), 31.vii. and 23.viii.2006, 3 ♂♂ 1 ♀, MT, JCM; 13.–16.viii.2007, 1 ♂, YPT, J. Sidonie, Sidonie NR (12), 8.ix.2010, 1 ♀, MT, CM. Žitková, Hutě NR (17), 31.vii.2007, 1 ♀, MT, JCM. Kněždub, Čertoryje NNR – Járkovec brook (20), 31.vii. and 31.viii.2006, 9 ♂♂ 5 ♀♀, MT, JCM. Kněždub, Čertoryje NNR (21), 31.vii. and 18.ix.2006, 3 ♀♀, MT, JCM. Radějov, Kútky NR – Mandát brook (23), 26.viii.2008, 1 ♀, MT, JCM. Velká nad Veličkou, Zahrady pod Hájem NNR (25), 24.viii.2009, 1 ♀, SW, J. Javorník, Jazevčí NNR (26), 24.viii.2009, 1 ♀, MT, JCM. Javorník, Jazevčí NNR (28), 24.viii.2009, 1 ♀, MT, JCM. Javorník, Machová NR (36), 2.viii. and 22.viii.2007, 4 ♀♀, MT, JCM. Strání, Záhumenice NM (37), 12.viii.2010, 1 ♀, MT, CM.

Comments. A Euro-Siberian species. The biology of immature stages is insufficiently known, only a single larva from a river bank has been reared to eclosion (ANDREEVA 1990).

***Tabanus maculicornis* Zetterstedt, 1842**

Material examined. Petrůvka, U Petrůvky NM (1), 23.vi.2008, 1 ♀, MT, JCM. Poteč, Ploštiny NR (4), 22.vi. and 13.vii.2006, 1 ♂ 7 ♀♀, MT, JCM. Valašské Klobouky, Bílé potoky NR (5), 23.vi., 13.vii. and 31.vii.2006, 2 ♂♂ 13 ♀♀, MT, JCM; 19.vii.2006, 1 ♀, MT, O. Brumov-Bylnice, Bylničky (10), 21.v.2009, 6 ♀♀, SW, J. Svatý Štěpán, Chladný vrch NM (13), 11.viii.2010, 1 ♀, MT, CM. Žitková, Hutě NR (17), 29.v. and 19.vi.2007, 11.vii.2008, 10 ♀♀, MT, JCM. Vyškovec, Drietomice brook (18), 8.vii.2010, 1 ♀, SW, C. Kněždub, Čertoryje NNR – Járkovec brook (20), 20.vi., 10.vii. and 31.vii.2006, 1 ♂ 13 ♀♀, MT, JCM. Kněždub, Čertoryje NNR (21), 10.vii.2006, 1 ♀, MT, JCM. Radějov, Kútky NR (24), 26.vi. and 15.vii.2008, 3 ♀♀, MT, JCM. Javorník, Jazevčí NNR (28), 15.vii.2009, 2 ♀♀, MT, JCM. Nová Lhota, Vápenky, Javorina NNR – Vadovská (31),

Horse flies (Diptera: Tabanidae)

14.vii.2009, 2 ♀♀, SW, J. Javorník, Machová NR – higher slopes (32), 13.vii.2010, 1 ♀, MT, CM. Javorník, Machová NR – Rybnický potok brook (33), 13.vii.2010, 1 ♀, MT, CM. Javorník, Machová NR – Rybnický potok brook (35), 18.v.2007, 1 ♀, MT, JCM. Javorník, Machová NR (36), 18.v., 28.v., 9.vii. and 2.viii.2007, 3 ♂♂ 22 ♀♀, MT, JCM. Strání, Javořina NNR – peak (38), 15.vii.2009, 1 ♀, MT, JCM.

Comments. A European and western Siberian forest species, distributed throughout Europe including the boreal ecoregion and also present in the Caucasus, Kazakhstan and around the Lake Baikal. The larval habitats are the same as in *T. bromius*.

Tabanus spodopterus spodopterus Meigen, 1820

Published records. MOUCHA & CHVÁLA (1956), JEŽEK (1995), OMELKOVÁ *et al.* (2008): Luhačovice (6872/6972). MOUCHA & CHVÁLA (1958a), OMELKOVÁ *et al.* (2008): Javorník (7171). JEŽEK (1995), OMELKOVÁ *et al.* (2008): Strážnice (7069/7169).

Material examined. Valašské Klobouky, Bílé potoky NR (5), 13.vii. and 31.vii.2006, 8 ♂♂ 2 ♀♀, MT, JCM. Šanov, Rokytenka brook (9), 14.vii.2009, 1 ♀, SW, C. Kněždub, Čertoryje NNR – Járkovec brook (20), 10.vii. and 31.vii.2006, 5 ♂♂ 7 ♀♀, MT, JCM. Kněždub, Čertoryje NNR (21), 31.vii.2006, 1 ♂, MT, JCM. Radějov, Kútky NR (24), 15.vii.2008, 1 ♀, MT, JCM. Javorník, Jazevčí NNR (28), 5.viii.2009, 1 ♀, MT, JCM. Nová Lhota, Hryzlácké Mlýny (29), 15.vii.2009, 2 ♀♀, SW, J. Javorník, Machová NR – Rybnický potok brook (33), 3.vii.2010, 1 ♀, MT, CM. Strání, Záhumenice NM (37), 12.viii.2010, 1 ♀, MT, CM.

Comments. Restricted to central and southern Europe (including southern Russia). Biology unknown.

Tabanus sudeticus Zeller, 1842

Published records. MOUCHA & CHVÁLA (1958a), OMELKOVÁ *et al.* (2008): Javorník (7171).

Comments. A European and western Siberian species, rare in lowlands; a typical member of the fauna in hills and mountains with the presence of cattle. Its larvae live in swamps near forest water reservoirs. They may require three years to complete the life cycle (ANDREEVA 1990).

Theriopectes gigas (Herbst, 1787)

(VU)

Published records. MOUCHA & CHVÁLA (1958b, 1959), GUNÁROVÁ (1984), JEŽEK & JEŽKOVÁ (1978), OMELKOVÁ *et al.* (2008): Javorník (7171), Velká Javořina Mt. (7172).

Material examined. Javorník, Machová NR (32), 14.vi.2010, 1 ♀, MT, CM. Javorník, Machová NR (36), 28.v.2007, 1 ♀, MT, JCM.

Comments. Known from southern and central Europe, with the northern limit of distribution passing through France, the North Sea coast, Czech Republic (present here only in southern Moravia), Slovakia, and Hungary; reaching the Apennines and the Balkans in the south. Biology unknown. A vulnerable species according to the Red List of threatened invertebrates of the Czech Republic (JEŽEK & BARTÁK 2005).

Discussion and conclusions

Based on historical work and more particularly upon our own recent collections, a total of 26 species of 8 genera of Tabanidae are currently known from the Bílé Karpaty PLA. This number makes up 47% of the horse fly species recorded from the Czech Republic and 54% of the species known from Moravia (CHVÁLA 2009, JEŽEK & BARTÁK 2005). The diversity of the horse fly fauna of the Bílé Karpaty is comparable to several other regions in the Czech Republic that have previously been studied in detail: the Pálava Biosphere Reserve (29 spp. of Tabanidae – JEŽEK 1999), the industry-affected region of Bilina and the environs of Duchcov in north-western Bohemia (17 spp. – JEŽEK & BARTÁK 2000), the Podyjí National Park and its environs (33 spp. – JEŽEK *et al.* 2005), and the Jizerské hory Mts. and Frýdlant region (26 spp. – JEŽEK *et al.* 2008). Thanks to the rich material examined in our study, the Czech part of the Bílé Karpaty Mts. has probably become a relatively well-known region in respect to horse-fly fauna. Future additional findings, particularly of some southern European species, however, cannot be excluded.

From a zoogeographical point of view, the horse fly fauna of the Bílé Karpaty is made up of species of European (5 spp., 19%), European and western Siberian (6 spp., 23%), Euro-Siberian (7 spp., 27%), sub-Mediterranean (5 spp., 19%) and Palaearctic (3 spp., 11%) distributions.

The most interesting findings made during this faunistic survey in the Bílé Karpaty PLA are records of *Haematopota bigoti* from Jazevčí NNR, Machová NR and Ploščiny NR, and *H. ocelligera* from Hutě NR, both species new for the fauna of the Czech Republic. Neither has yet been evaluated in the national Red List of Czech invertebrate fauna (JEŽEK & BARTÁK 2005) because they were collected only after its current edition. However, they are probably scarce in the Czech Republic and may be considered candidate species for the Red List. *Theriopectes gigas* from Machová NR was classified by JEŽEK & BARTÁK (2005) as a vulnerable species in the Czech Republic. *Theriopectes gigas* and *Haematopota ocelligera* probably reach their northern limit of distribution in the Bílé Karpaty PLA.

Tabanus bromius was the most frequently-collected species in the study area (in 32 localities), followed by *Haematopota pluvialis* (24 localities) and *H. scutellata scutellata* (14 localities). In contrast, six species (*Atylotus rusticus*, *Chrysops relictus*, *Hybomitra ciureai*, *H. micans*, *H. tropica*, and *Haematopota ocelligera*) were collected at only a single locality. The highest numbers of specimens and species of horse flies were found in Čertoryje NNR (3,203 specimens, 15 species), Machová NR (3,008 specimens, 17 species) and Bílé potoky NR (619 specimens, 11 species). Only one tabanid species was trapped at five of the collecting sites. The species richness of Tabanidae at any given site partly depends on the number of cattle and deer in the landscape, which may explain the differences between the individual localities.

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Souhrn

Ovádovití (Diptera: Tabanidae) Chráněné krajinné oblasti a biosférické rezervace Bílé Karpaty.

Během faunistického výzkumu hmyzu v Chráněné krajinné oblasti a biosférické rezervaci Bílé Karpaty, který byl v letech 2005–2010 zaměřený i na některé vybrané skupiny dvoukřídlých, bylo na 38 lokalitách nasbíráno celkem 25 druhů čeledi ovádovití (Tabanidae; dohromady 8633 jedinců). Spolu s výhradně historickým nálezem druhu *Tabanus sudeticus* bylo v CHKO Bílé Karpaty dosud nalezeno 26 druhů ovádů, což odpovídá 47 % z celkového počtu 57 druhů známých z České republiky. Mezi významné nálezy patří zejména *Haematopota bigoti* Gobert, 1881 a *H. ocelligera* (Kröber, 1922), jakožto první nálezy pro faunu ČR, a vzácný druh *Therioplectes gigas*, který je v Červeném seznamu ohrožených druhů bezobratlých ČR zařazen v kategorii zranitelný (VU). Poslední dva zmíněné druhy dosahují v Bílých Karpatech své severní hranice rozšíření. Z celkového počtu zjištěných druhů má 5 druhů (19 %) evropské, 6 druhů (23 %) evropsko-západosibiřské, 7 druhů (27 %) evropsko-sibiřské, 5 druhů (19 %) submediteránní a 3 druhy (11 %) palearktické rozšíření. Nejhojnějšími druhy byly *Tabanus bromius* (sbíraný na 32 lokalitách), *Haematopota pluvialis* (24 lokalit) a *H. scutellata* (14 lokalit). Pouze na jediné lokalitě byly nalezeny druhy *Atylotus rusticus*, *Chrysops relictus*, *Hybomitra ciureai*, *H. micans*, *H. tropica* a *Haematopota ocelligera*. Nejvíce jedinců a druhů bylo odchyceno na lokalitách NPR Čertoryje (3203 jedinců, 15 druhů), PR Machová (3008 jedinců, 17 druhů) a PR Bílé potoky (619 jedinců, 11 druhů). Na základě této práce lze konstatovat, že fauna čeledi Tabanidae moravské části Bílých Karpat je nyní poměrně dobře známa, avšak ojedinělé nálezy dalších jihoevropských druhů ovádů v této oblasti nelze vyloučit.

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Horse flies (Diptera: Tabanidae)

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