

NEW COUNTRY RECORDS AND RANGE EXTENSIONS FOR MYANMAR AMPHIBIANS AND REPTILES

Guinevere O. U. Wogan^{1,2,4}, Jens V. Vindum¹, Jeffery A. Wilkinson¹,
Michelle S. Koo^{1,2}, Joseph B. Slowinski¹, Htun Win³, Thin Thin³,
Sai Wanna Kyi³, San Lwin Oo³, Kyi Soe Lwin³ and Awan Khwi Shein³

¹Department of Herpetology, California Academy of Sciences,
San Francisco California, U.S.A.

²Museum of Vertebrate Zoology, 3101 Valley Life Sciences Bldg.
Berkeley, California, U.S.A.

³Nature and Wildlife Conservation Division, Forest Department,
Ministry of Forestry, Myanmar.

⁴corresponding author. Email: gwogan@berkeley.edu

(with one text-figure)

ABSTRACT.– Myanmar lies at a biogeographic crossroads where the faunas of China, Indochina, India, Himalaya, and the Malay Peninsula converge. Since 1999, the Myanmar Herpetological Survey, a collaborative effort the California Academy of Sciences, the National Museum of Natural History, Smithsonian Institution, and the Forest Department, Ministry of Forestry, Myanmar, has surveyed the amphibians and reptiles throughout the country. Our surveys in Myanmar have added many additions to the country's fauna, and species ranges within Myanmar have been extended. These general biotic surveys represent the only new information for much of Myanmar's herpetofauna for over a half-century. We present 18 new country records and 45 range extensions and state records in this paper.

KEY WORDS.– Myanmar, amphibians, reptiles, geographic distribution.

INTRODUCTION

The herpetofauna of Myanmar is poorly known. Early collections by Leonard Fea followed by collections by the British set the groundwork for our understanding of the biodiversity within Myanmar. Although many species were described from Myanmar primarily by British naturalists George Boulenger, Malcolm Smith and Frank Wall, during the late 19th and early 20th centuries, comprehensive surveys of the country's herpetofauna have not been conducted until initiated by the National Museum of Natural History, Smithsonian Institution, and the California Academy of Sciences. The Myanmar Herpetological Survey, a collaborative effort among the California Academy of Sciences (CAS), National Museum of Natural History, Smithsonian Institution (USNM) and the Nature and Wildlife Conservation Division, Forest Department,

Ministry of Forestry, Myanmar, has surveyed throughout the country from 1999 to present, and as such has discovered new species (18 of which have been recently described in Slowinski and Wüster, 2000; Slowinski et al., 2001; Bauer, 2002, 2003; Schulte et al., 2004; Vindum et al., 2003; Wilkinson et al., 2003, Wilkinson et al., 2005; Wogan et al., 2003; Zug et al., 2006), rediscovered some rare species (Wilkinson and Rao, 2004; Gonzalez et al., 2005), as well as new country division/state records (Leviton et al., 2003; Gonzalez and Vindum, 2005), and range extensions.

The importance of documenting the composition of the herpetofauna within Myanmar has been pointed out in several region wide assessments (Inger, 1999; Bhupathy, 2000; Das, 2000). Because of the biogeographic position of Myanmar, and because so many type localities lie

within Myanmar's borders, an understanding of the patterns of distribution, and the evolutionary histories of Asia's amphibian and reptile species can not be fully understood until data from Myanmar can be incorporated into comprehensive regional assessments.

At present, there are 82 amphibian and 289 reptile taxa (Zug et al., 2003) documented in Myanmar. The authors anticipate that the number of species confirmed from Myanmar will continue to grow as survey efforts in border regions with Bangladesh, India, China, Laos and Thailand, are carried out and research progresses. The first part of this paper details species that are documented for the first time in Myanmar bringing the known number of amphibian species up to 94 and known reptile species to 295. The second portion outlines division/state records and range extensions. Within each section, records are organized alphabetically by family and then by genus and species. Distribution data for snakes belonging to the families Elapidae and Viperidae are further detailed in Leviton et al. (2003). Distributions for species belonging to the genus *Hemidactylus* within Myanmar are depicted in Zug et al. (2007). Amphibian taxonomy follows AmphibiaWeb (2007).

METHODS

Animals were collected by hand by the authors. Latitude and longitude were recorded using a Garmin 12 XL GPS (datum WGS 84). Animals were euthanized and then fixed in 10% buffered formalin before being transferred to 70% ethanol. Specimens are deposited in the California Academy of Sciences (CAS).

Identifications were made by Htun Win, J. B. Slowinski, J. V. Vindum, and G. O. U. Wogan in the field, and confirmed against museum specimens and literature by J. A. Wilkinson (Rhacophoridae), J. V. Vindum and M. S. Koo (Sauria), J. B. Slowinski (*Amphiesma*, *Rhabdophis*) and G. O. U. Wogan (remaining taxa). Records reported by Shreve (1940) were confirmed by Wogan. Museum symbolic codes follow Leviton et al. (1985). For commonly encountered species, not all individuals are included, no more than 20 unique localities are included to cover the distribution within the country. Detailed locality descriptions can be obtained from the Department of Herpetology's website (<http://www.calacademy.org/research/herpetology/catalog/>).

Unless otherwise noted, catalogue numbers refer to CAS specimens. Museum numbers following the detailed distribution data refer to specimens examined, museum numbers not appearing in this section, but otherwise mentioned are taken from the literature. Unless otherwise mentioned, identifications of materials cited from the literature, have not been confirmed by the authors. Figure 1 shows geopolitical boundaries of Myanmar and the region.

RESULTS

New Country Records

Megophryidae

Xenophrys longipes (Boulenger, 1886)

This species is widespread in southern Thailand and the Malay Peninsula (Chan-ard et al., 1999). We discovered a single individual of this species at night in evergreen hardwood forest in southern peninsular Myanmar, Tanintharyi Division.

Tanintharyi Division: 235843.

Xenophrys glandulosa (Fei et al., 1991)

Described from Yunnan, this species has also been documented in Nagaland, India (Ao et al., 2003), and is now reported from northern Kachin State, Myanmar.

Kachin State: 221363, 221395, 221442, 221484, 221567–68.

Microhylidae

Microhyla rubra (Jerdon, 1854)

Originally described from the Carnatic region, this species was previously known only from India (including Assam) and Sri Lanka (Frost, 2007). Dutta (1997) mentions a record of this species from the Moulmein (Mon State) area, but the source of this record has not been confirmed. The discovery of this species in Myanmar is, in addition to being a new country record, the easternmost record of its distribution. Representatives of this species have thus far been documented only from Magwe Division. Individuals were found at night during the monsoon season. Sympatric congeners include

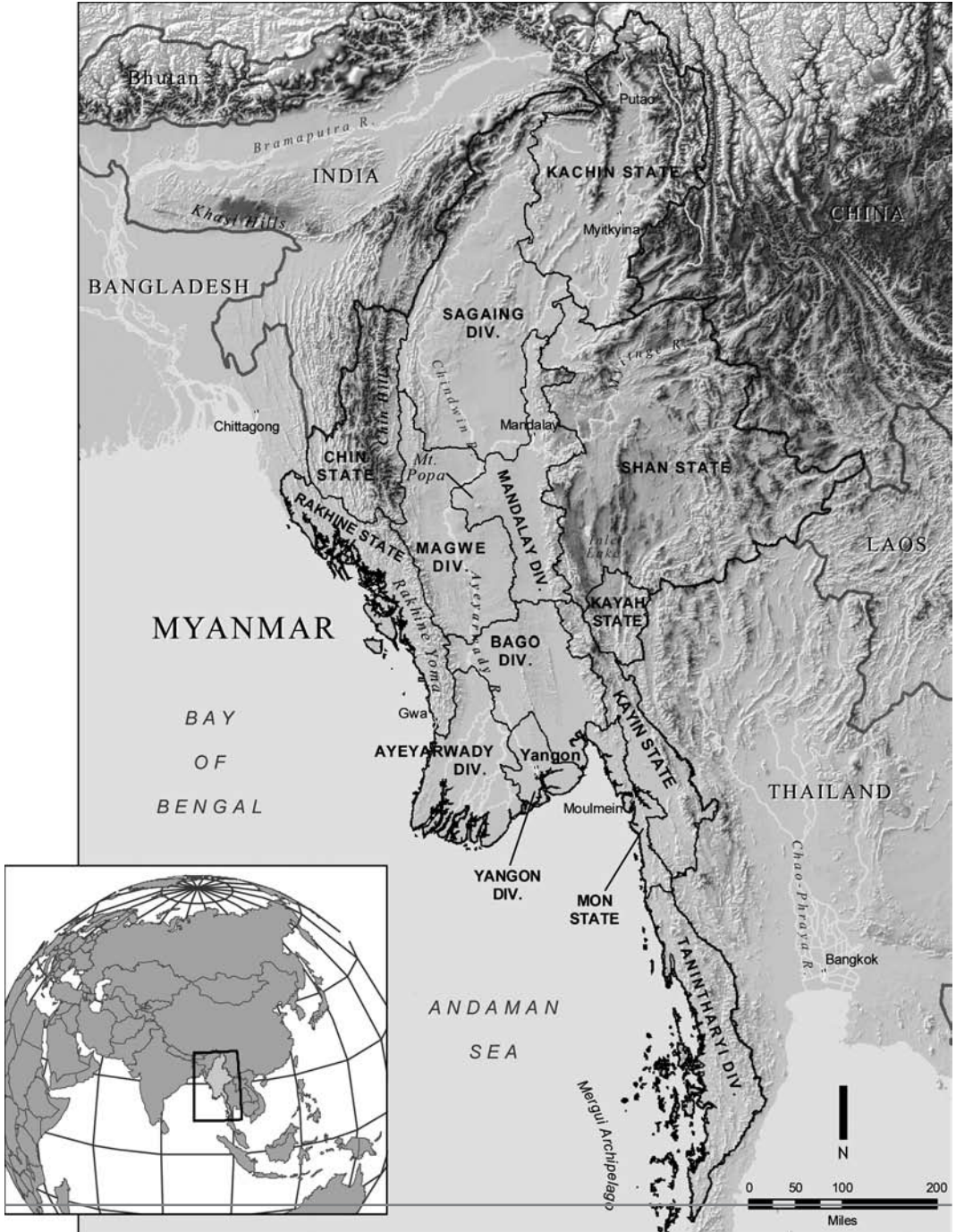


Figure 1. Map of Myanmar, with geopolitical boundaries indicated.

M. berdmorei, *M. ornata*, and an undescribed species.

Magwe Division: 213799, 215851–90.

Ranidae

Amolops viridimaculatus (Jiang, 1983)

One representative of this species was found in Kachin State, northern Myanmar. In addition to China (Jiang, 1983), recent records have also emerged from two states in north-east India; Nagaland (Ao et al., 2003) and Arunachal Pradesh (*A. cf. viridimaculatus*) (Pawar and Birand, 2001) and northern Vietnam (Ohler et al., 2000). The lone individual was found in bamboo canopy (Wogan et al., 2004).

Kachin State: 224378.

Euphlyctis cyanophlyctis (Schneider, 1799)

The species has been reported from areas as far west as Afghanistan (Frost, 2007), and throughout India, including Nagaland (Ao et al., 2003), and Kamrup (Choudhury et al., 2002). Sclater (1892) reported this species from Jergo Island, Arakan (Rakhine State; ZSI 9349—formerly 12632–3), and Moulmein (Mon State; ZSI 10960), however, of the above specimens ZSI 12633 was destroyed, 12632 is reported in the ZSI catalogue simply as “frog”, and ZSI 10960, although identified as *Rana cyanophlyctis*, lacks locality data beyond “Austin?” (M. S. Ravichandran pers. comm. 2004). In light of the fact that none of the former records are verifiable as *E. cyanophlyctis* from Myanmar, they should be treated with caution. Theobald (1882) mentioned this species from Pegu, but no precise catalogue numbers were reported and there has been no confirmation of this record. Theobald (1882) also mentioned records from the Malay Peninsula and Bengal. Sukumaran (2002) does not report recent records of *E. cyanophlyctis* in Peninsular Malaysia. Smith (1930) and Boulenger (1912) both pointed out that Cantor’s records with the locality listed as Penang are unreliable, and Smith (1930) stated that except for Annandale’s 1917 record from Singgora (Talé Sap) on the Malay Peninsula no records of this species are reported from Indo-China. Taylor (1962) further suggested that this record may be the result of an introduction. We have found *E. cyanophlyctis* in northern Rakhine State close to

the Bangladesh border. Individuals were found at night in water.

Rakhine State: 222035–37, 221088, 221118, 222075.

Fejervarya cancrivora (Gravenhorst, 1829)

This species has been found throughout coastal SE Asia (excluding Myanmar) and Indonesia from where it was originally described. Individuals were found on mudflats in tidal streams in mangrove forest. Thus far, this species has been documented in Ayeyarwady Division, Mon and Rakhine States.

Ayeyarwady Division: 222697, 222736–37, 222756, 222800; Mon State: 222621; Rakhine State: 222964, 222978, 222982, 223080–83, 223336–37.

Occidozyga borealis (Annandale, 1912)

Originally described from Arunachal Pradesh, India, this species was recently rediscovered in Arunachal Pradesh District (Pawar and Birand, 2001), and Nagaland NE India (Ao et al., 2003), and is now documented from Chin and Rakhine States. In Myanmar, individuals were found under rocks in dry streambeds, or on the rocky shores of streams and small pools in coastal rainforest.

Chin State: 234936 Rakhine State: 205064–92, 211640–45, 216553–54, 220134–36, 220140–47, 220162–65, 222995–3036, 223091, 223112–16, 223128–29, 223139–54, 223178, 223194–95, 223208–12, 223237–40.

Pterorana khare Kiyasetuo and Khare, 1986

This species was discovered in Nagaland, India. Additional records from throughout NE India are reviewed in Ao et al. (2006). We recently encountered this species in Chin State. Individuals were found in slow moving water sitting on egg masses.

Chin State: 234933, 234941–42.

Rana chalconota (Schlegel, 1837)

Known from throughout Indonesia, and Malaysia and peninsular Thailand, this species was documented in Tanintharyi Division, in the Pakchan Forest Reserve.

Tanintharyi Division: CAS 229539, 229564, 229610.

Rana chloronota (Günther, 1875)

Originally described from northern India, this species has been historically confused with *Rana livida* (see Bain et al., 2003 for discussion). Most recently, this species has been confirmed from Vietnam (Bain et al., 2003). In Myanmar, *R. chloronota* has been found in low-lying montane forests in Kachin, Rakhine, and Shan States as well as Bago, Sagaing and Tanintharyi Divisions.

Bago Division: 211671, 211719, 221850; Kachin State: 221261, 221315–56, 221321, 221393–94, 224702, 221534, 224702, 224748, 225153, 225211, 225540, 232920, 233101, 233112; Rakhine State: 216574, 220186–88, 220260–61, 220271–76, 220341, 220347–48, 220367, 220466, 220612, 222907; Sagaing Division: 210224, 210230–31, 210233–35, 221776; Shan State: 210642, 221771–72; Tanintharyi Division: 229539, 229564, 22601.

Rana hosii (Boulenger, 1891)

A single specimen referable to *R. hosii* has been documented in southern Myanmar in the Pakchan Reserve Forest in Tanintharyi Division.

Tanintharyi Division: 229627.

Rana taipehensis Van Denburgh, 1909

Smith (1940) tentatively identified one specimen from N'Chang Yang, Kachin State, to this taxon, however, he remarked on the lack of an outer metatarsal tubercle, which is present on the holotype (CAS 18007). We report the presence of *R. taipehensis* from low elevations throughout Myanmar. All observed *R. taipehensis* from Myanmar possess a distinct outer metatarsal tubercle, and despite extensive surveys in Kachin State, *R. taipehensis* has not been documented in the region, indicating that Smith's specimen is perhaps not *R. taipehensis*. Assigning Smith's specimen a specific name requires additional evaluation. Records for this species now exist for Rakhine and Mon States, Ayeyarwady, Bago, Mandalay, and Yangon Divisions. Individuals have been found in flooded fields and along forest streams.

Ayeyarwady Division: MCZ A–132432, 132460–61, 132462–65, CAS 212433, 220609, 222717–20; Bago Division: 210743, 222095; Mandalay Division: 208473; Mon State: 222524,

222572; Rakhine State: 205298, 220148–50, 220161, 221082–3, 221085, 221093, 221098–100, 221104–06, 221111–13, 221130–33, 221952, 221977, 222015, 222032, 222050–52, 222054–55, 222057, 222987, 222994, 223108; Yangon Division: 210805, 213434.

Colubridae

Amphiesma xenura (Wall, 1907)

Previously reported from both the Khasi Hills (Smith, 1943) and Naga Hills (Romer, 1945) in Assam, India. Recent surveys have also found this species in the Palak Lake area, Mizoram Assam (Pawar and Birand, 2001). In Myanmar, this species has been encountered in northwest Sagaing and throughout the Rakhine Hills, Rakhine State.

Rakhine State: 220256, 220332, 220368–71, 220378, 222969; Sagaing Division: 232203.

Lycodon jara Russell, 1796

Known from NE India and Nepal (Das, 2002), this species was encountered in northern Kachin State, making it the first record for SE Asia. One of the individuals was found moving in open grass, the other was found in an agricultural area.

Kachin State: CAS 235387–88.

Lycodon subcinctus Boie, 1827

Documented from countries bordering Myanmar, two individuals were encountered in Kachin State and Tanintharyi Division. Both individuals were found at night in a disturbed habitat.

Kachin State: CAS 235846; Tanintharyi Division: 229726.

Pareas monticola (Cantor, 1839)

This species was originally described from the Naga Hills in NE India. A single specimen was found in the Chin State in the Mindat district. Co-occurring congeners include *P. macularius*.

Chin State: 235254.

Sinonatrix yunnanensis Rao and Yang, 1998

This species was previously reported only from Yunnan Province, China. Records from

Kachin State represent the first records of the species outside of China.

Kachin State: 221518, 221544, 224440, 224485, 224730.

Scincidae

Tropidophorus robinsoni Smith, 1919

This lizard was previously known only from Thailand. We have documented one specimen from the Tanintharyi Division of Myanmar in the Dawei Region (formerly Tavoy).

Tanintharyi Division: 228558.

New State Records and Geographic Range Extensions

Bufo

Bufo asper (Gravenhorst, 1829)

This species is known from peninsular Thailand and peninsular Malaysia (Taylor, 1962; Frost, 2007). Taylor (1962) reported the species occurring as far north as Chumphon, Thailand. Fea collected a specimen (ZMH A04113) from Mount Karen, Kayah State (Hallerman et al., 2002) and a second specimen from Thagata Juwa (Kayah State; Boulenger, 1887). Other historical records for Myanmar are primarily from the Myeik Archipelago in Tanintharyi Division, collected during the Mergui Expedition by Anderson in 1882 (deposited at the ZSI). A recent record from Kyaik Kti Yo Wildlife Sanctuary represents the first documentation of this species in Mon State.

Mon State: 222196.

Bufo macrotis Boulenger, 1887

This species was originally described from Teinzo and Kakhein Hills (Kachin State). Boulenger (1892–3) further reported it from Palon (Yangon Division). Outside of Myanmar, it is known from Thailand (Taylor, 1962). Recent surveys have encountered this species in north-west Sagaing Division near the Indian border.

Sagaing Division: 232191, 232195.

Microhylidae

Glyphoglossus molossus Günther, 1869

The type locality is in Bago Division (Frost, 2007). Although Boulenger (1890) reported the species as occurring in the Irrawaddy Delta (Ayyarwady Division) and Pegu (Bago Division), he mentioned that he only had one specimen (the type), thus there is some confusion concerning the location of the type locality. Theobald (1882) provides additional details concerning the discovery of the type specimen mentioning that it was discovered in the “tidal portion of the Irrawaddy Delta”. The species has been reported from east-central Sagaing Division by Zug et al. (1998) and from Prome (Bago Division) by Shreve (1940). We have recorded the species from Mandalay Division and south-western Sagaing Division.

Mandalay Division: 216094–95, 221608–09; Sagaing Division: 210056, 210117.

Microhyla berdmorei (Blyth, 1856)

Records are available for Bago (reported as Pegu) and a general locality of Burma (Boulenger, 1882). Bourret (1942) reported the species from Pegou (Bago Division) and Karin Biapo (Kayah State), and Shreve (1940) reported a single specimen (MCZ A-23433) from the Chin Hills, Chin State, however, the collection locality is actually in Magwe Division (Aingyi, Pakokku Hills), thus this species is not presently known to occur in Chin State. Choudhury et al. (2002) recently reported this species from northern India. Our surveys have found this species in Rakhine and Shan States, and Magwe, Sagaing, Tanintharyi and Yangon Divisions.

Magwe Division: 219884–85; Rakhine State: 205029–48, 205199, 216534–39, 220410–11, 221150, 222908–15, 222971–72, 223045–46, 223048–51, 223054–56, 223105, 223135–37, 223166, 223169–71; Sagaing Division: 204875–80, 205191–98, 215686–87; Shan State: 210637; Tanintharyi Division: 229765 Yangon Division: 213242–43, 213415–16, 213432–33, 213488–89.

Microhyla butleri Boulenger, 1900

Bourret (1942) reported this species from He-Ho Plains of southern Shan State, this record

confirmed by ZSI 19324. Hallermann et al. (2002) recorded this species from Kayah State (ZMH A04074). We obtained representatives of this species from Yangon Division, making it the western-most records of this species.

Yangon Division: 210750–60, 210822–27.

Microhyla heymonsi Vogt, 1911

Bourret (1942) records this species from He Ho Valley (southern Shan State), and Hallermann et al. (2002) recorded it from Kayah State (ZMH A04068–72). In addition to records from Shan State, we have also located this species in Kachin State and Tanintharyi and Yangon Divisions. Thus far, the distribution does not extend into or west of the central dry zone of Myanmar.

Kachin State: 232718; Tanintharyi Division: 229637, 229830; Yangon Division: 210748–49, 210785, 210789.

Ranidae

Ingerana tenasserimensis (Sclater, 1892)

Historical records from Myanmar are from Tanintharyi and the Karen Hills, Kayah State (Bourret 1942), our surveys have found this species throughout Mon State.

Mon State: 210557–58, 222205–08, 222217, 222245–60, 222269–74, 222443–57, 222461–68, 222474–89, 222535–69, 222579–80, 222596–600, 222609–10, 222663–64.

Limnonectes limborgi (Sclater, 1892)

Known from the type locality of Meetan, Tենnasserim (Tanintharyi Division; Sclater, 1892) and Karen Bia-po, Yado and Thao (Kayah State; Boulenger, 1888). This species has been documented in Mon State.

Mon State: 210559–62.

Rana cubitalis (Smith, 1917)

This species is reported from the Karen Hills (Kayah State) by Smith (1930). Shreve (1940), with uncertainty, referred specimens (MCZ–A23425–9) from Maymyo (Mandalay Division) to this species. We obtained a specimen referable to this species from Mandalay Division.

Mandalay Division: 216286.

Rana lateralis Boulenger, 1887

The type locality of the species is from the Moulmein area in Mon State (Boulenger, 1887). Boulenger (1888) recorded additional specimens from Palon and Rangoon (Yangon Division) and Pegu (Bago Division); Shreve (1940) recorded specimens from Hmawbi (Yangon Division) and Chin State, Zug et al. (1998) from Sagaing Division and Hallermann et al. (2002) from Yangon Division (ZMH A 04120). We recorded the species from Magwe Division and Kachin State.

Kachin State: 232504; Magwe Division: MCZ A–23415; Yangon Division: 210791, 210797, 210806, 220527, MCZ A–23390–91.

Rana macrodactyla (Günther, 1858)

Rana macrodactyla has been reported from Bhamo (Kachin State; Bourret, 1942) and from Palon (Yangon Division; Bourret, 1942; Hallermann et al. 2002; ZMH A04119). The range is now extended east to Mon State.

Mon State: 222492, 222644.

Sphaerotheca breviceps (Schneider, 1799)

The first record of this species in Myanmar was from the Chattin Wildlife Sanctuary, Sagaing Division (Zug et al., 1998). The distribution now includes Mandalay, Magwe, Yangon Divisions and Shan State.

Magwe Division: 210701, 213872–73; Mandalay Division: 210659, 210666, 216097–104, 216126, 216263, 221636–43, 221833–35; Shan State: 221635; Yangon Division: 213294.

Rhacophoridae

Chirixalus doriae Boulenger, 1893

The type locality of this species is the Karin Bia-po District (Kayah State). Hallermann et al. (2002) recorded the species from Kayah State (ZMH A03144, A031445), and Shreve (1940) reported this species from “30 km north of Prome” (Bago Division; MCZ A–23402–9+4 uncat.) Our survey has revealed the distribution to include Yangon, Mandalay and Sagaing Divisions, Rakhine and Kachin States.

Kachin State: 232962, 232979–81, 233052–54, 233072–73; Mandalay Division: 216079, 216116–17; Rakhine State: 221134–35; Sagaing

Division: 210078–94, 210247–48, 215527–30, 215628–30; Yangon Division: 210782.

Chirixalus nongkhorensis (Cochran, 1927)

Ahl (1930) reported the species (listed as *Rhacophorus (Chirixalus) striatus*) from Carin-Berge (Kayah State) and Zug et al. (1998) has recorded the species from the Chatthin Wildlife Sanctuary, Sagaing Division. Additional specimens have now been recorded from Mandalay Division and Rakhine State.

Mandalay Division: 215915; Rakhine State: 221564.

Chirixalus vittatus (Boulenger, 1887)

Originally described from Kachin State (Bhamo), and reported from Palon (Yangon Division) by Fea (1897), this species was found throughout Kachin State, as well as Bago Division and Rakhine State.

Bago Division: 215824; Kachin State: 232963–65, 232974–78, 233060–71, 233082; Rakhine State: 221114–15.

Rhacophorus bipunctatus Ahl, 1927

Known from collections made by Fea in 1887 from the Karen Hills (Kayah State) as *Rhacophorus bimaculatus* (Boulenger, 1892–3), this species has recently been encountered in Shan and Kachin States. Recent work has suggested that smaller brown species with black spots on the sides typically considered *R. bipunctatus* from throughout SE Asia are actually *R. rhodopus*, while larger green species with black spots on the sides recently described as *R. htunwini* (Wilkinson et al., 2005) are *R. bipunctatus* (Bordoloi et al., 2007), further examination of the Myanmar populations are required.

Kachin State: 221344–45, 221492, 224676–77, 224690, 224734–35, 224755, 225127, 225150–52, 229886–87, 229891–92, 229894–95, 229897; Shan State: 229898–99, 229900–12, 229914–15.

Colubridae

Ahaetulla fronticincta (Günther, 1858)

Ahaetulla fronticincta was reported from Rangoon (Yangon) and Pegu (Bago) regions by Smith (1943) and from Rakhine State by Theobald (1882). Our surveys have found this spe-

cies in mangrove habitat as far south as Mudon Township in southern Mon State, throughout the Yangon area, and as far east as Myaung Mya Township, Ayeyarwady Division.

Ayeyarwady Division: 204966, 212237, 219789, 222797; Mon State: 222584–90, 222594, 222612–13, 222617, 222619–20, 222634–39.

Calamaria pavimentata Duméril, Bibron and Duméril, 1854

Smith (1943) reported a general locality of west to the Chin Hills (Chin State) for the Myanmar distribution. We obtained individuals of this species in northern Kachin State.

Kachin State: 224575, 224647, 230226.

Coelognathus radiatus (Boie, 1827)

Wall (1926) recorded this species from Shan and Kachin States, Schulz (1996) from Rakhine, Kachin, and Kayin States, Mandalay, Mon, Bago and Yangon Divisions, Zug et al. (1998) from Sagaing and Hallermann et al. (2002) from Palon (Yangon Division; ZMH R06248), and Malewoon (Tanintharyi Division; ZMH R06254). Additional records are for Bago, Mandalay, Sagaing and Tanintharyi Divisions, and the first record of this species has been documented for Magwe Division.

Magwe Division: 210719, 213632, 213660, 213893.

Orthriophis taeniurus Cope, 1861

Schulz (1996) mentions an unnamed *E. taeniura* subspecies with which two of our specimens agree in scale counts and pattern. Two individuals referable to this subspecies were found in limestone caves in Shan State.

Shan State: 235825.

Dinodon septentrionale (Günther, 1875)

Smith (1943) recorded this species as far south as Chaing Mai Thailand and from throughout Myanmar, and both Boulenger (1892–3) and Hallermann et al. (2002) reported it from Kayin State (ZMH R05369). Wall (1908) reported this species from Mogok region (southern Kachin State). We obtained this species in northern Kachin State and northern Mon State.

Kachin State: 221512, 221527; Mon State: 222234.

Psammophis condanarus (Merrem, 1820)

Smith (1943) reported this species as occurring south of 21°N latitude, and stated that “no specimens have been obtained from “upper Burma”. We obtained specimens from Sagaing, Mandalay and Magwe Divisions that extend the distribution record north ca. 134 km.

Magwe Division: 210700, 215896, 215902; Mandalay Division: 215952, 215956, 215983–84, 216015, 216018, 216024, 216027–28, 216113, 216121; Sagaing Division: 215375, 215815.

Oligodon cinereus (Günther, 1864)

The Myanmar distribution is reported from Tanintharyi Division, Shan State (as far north as Taunggyi) and between the latitudes of 20° to 26° N (Smith 1943). This species was found in Kachin and Rakhine States and Sagaing and Yangon Divisions.

Kachin State: 221529; Rakhine State: 205028, 221933; Sagaing Division: 215597, 215605; Yangon Division: 213379, 213423–24.

Oligodon dorsalis (Gray, 1834)

This species is known from throughout NE India (Das, 2002) and has been reported from the Mansi Katha District of Chin Hills (Chin State; Smith, 1943), as well as N'Changyang (Kachin State; Smith, 1940). We have encountered additional individuals within both of these states that extend the distribution. In Chin State, individuals were encountered in the Mindat District (SE Chin State). In Kachin State, a single individual was found in Hukaung Valley on the border with India.

Chin State: 233295, 235310, 235362–63, 235365; Kachin State: 230264.

Oligodon mcdougalli Wall, 1905

Known only from the type specimen from Sandoway (Thandawe, Rakhine State), we extend the distribution south to the Gwa region of Rakhine State.

Rakhine State: 221086, 221969.

Oligodon planiceps (Boulenger, 1888)

Previously known from four specimens from Yangon and Bago Divisions (Tharrawaddy District) (Smith, 1943), records now exist for Magwe Division.

Magwe Division: 210842, 213822.

Oligodon quadrilineatus (Jan, 1866)

Smith (1943) recorded this species from Thailand, Cambodia and Vietnam, and Zug et al. (1998) from Sagaing Division. It was recently encountered in Shan State.

Shan State: CAS 236093.

Oligodon torquatus (Boulenger, 1888)

Smith (1943) reported this species from between Mytkyina and Bhamo in Kachin State, and Hallermann et al. (2002) recorded a specimen (ZMH R06249) from Kachin State. In addition, it was documented in Magwe and Mandalay Divisions.

Magwe Division: 210692–93, 210695; Mandalay Division: 215290, 215976.

Pareas macularius Theobald, 1868

Formerly documented from Yangon Division (Rangun [sic], Pegu) (Theobald, 1876), and Kachin (Htingnan, Mogok), Shan (Kalaw) and Tanintharyi (Martaban) States in Myanmar (Smith, 1943), this species was also encountered in Chin State and Bago Division.

Bago Division: 206620; Chin State: 233330, 235218, 235359.

Rhabdophis himalayanus (Günther, 1864)

Venning (1910, 1911) and Shreve (1940) reported this species from Chin State, and Smith (1943) from latitudes higher than 22°N. Specimens were obtained from Rakhine State, extending the range 485 km to the south.

Rakhine State: 220255, 220350, 220372–73, 220380–81, 222906, 224420, 224425, 224438, 224705.

Rhabdophis nigrocinctus (Blyth, 1856)

Smith (1943) reported this species from Tanagerim (Tanintharyi) and as far north as Toungoo (Bago Division), two specimens (ZMH R05448–9) were also recorded from Kayah State (Hallermann et al., 2002). This species was documented in Shan State, near Kalaw, extending the distribution 185 km north within Myanmar.

Shan State: 215280.

Sibynophis bistrigatus (Günther, 1868)

This rare snake is known only from Prome and Pegu (Bago) in Bago Division (Smith, 1943). The range is extended northward to include Mandalay Division.

Mandalay Division: 214081

Xenochrophis trianguligerus Boie, 1827

The species, previously known in Myanmar from the Mergui Archipelago (Anderson, 1889; Smith, 1943) was recorded from the Dawei region of northern Tanintharyi Division.

Tanintharyi Division: 229658, 229784.

Gekkonidae

Cyrtodactylus annandalei Bauer, 2003

Originally described from a single locality in Sagaing Division, a single individual was documented in Magwe Division. The individual was found at night crossing the road in a deciduous hardwood forest.

Magwe Division: 234785.

Cyrtodactylus slowinskii Bauer, 2002

Previously known from a single protected area (Alaungdaw Kathapa National Park) in Sagaing Division, this species was recently encountered in southern Chin State. Individuals were found in evergreen forest.

Chin State: 234847, 234945, 235347.

Gehyra mutilata (Weigmann, 1834)

Reported from southern Burma by Smith (1935b), and from Burma without precise locality data by Rendahl (1937). We have records of this species from Ayeyarwady Division.

Ayeyarwady Division: 206567, 212899.

Agamidae

Acanthosaura lepidogaster (Cuvier, 1829)

Previously reported from Bago Division (ZMH R04615–16) and Kayah State (ZMH R04572–73, R04575–77) (Smith, 1935a; Hallermann et al., 2002). New records extend the distribution west to southern Rakhine State.

Rakhine State: 216422, 216598, 220137–38, 220258, 220334–35, 220337, 220345–46, 220374–76, 220383, 220430–31, 221937, 221983, 221991, 222010.

Draco blanfordii Boulenger, 1885

Myanmar populations of *Draco blanfordii* were previously reported from throughout Tenasserim with a northern distribution limit in the Dawna Hills (Kayah State). We confirm new records of this species from Tanintharyi Division, with additional records from Bago and Sagaing Divisions, and Shan and Kachin States.

Bago Division: 221153–54; Kachin State: 228480; Shan State: 228465; Sagaing Division: 228466.

Draco taeniopterus Günther, 1861

The Myanmar distribution previously included Tenasserim and Mergui Archipelago (Tanintharyi Division; Smith, 1935b). New records for Tanintharyi exist for the Dawei region, and the range is extended significantly farther north to Shan State.

Mon State: 222231–32, 222237, 222278–80, 222284; Shan State: 228464; Tanintharyi Division: 228468–69, 228471, 228477.

Japalura planidorsata Jerdon, 1870

Smith (1935b) reported this species from northern Chin Hills (Chin State). Recent collections of the species have been made in the Mount Victoria area of southern Chin State and from the Haka and Falam regions of northern Chin State.

Chin State: 219935, 220131–32, 233211, 233296.

Leiolepis belliana (Hardwicke and Gray, 1827).

Reported previously as having a northern limit of 18°N in Myanmar (Smith, 1935b), and near Moulmein (Mon State) by Hallermann et al. (2002; ZMH R06563–5). Recent northern records include Sagaing, Magwe and Mandalay Divisions and Chin and Shan States extend this range ca. 552 km to the north.

Chin State: 234701; Magwe Division: 210720–30, 213769, 213814, 213842, 213886; Mandalay Division: 214080, 214153, 214170, 215319–20, 215927, 215931, 215979, 215991, 216037, 216054, 216169, 216170, 216232; Sagaing Division: 210246, 210326, 215455, 215543–44, 215648, 215650–52, 215708; Shan State: 230478, 230586.

Scincidae

Eutropis novemcarinata (Anderson, 1871)

Smith (1935b) listed this species as occurring in Mandalay, Yangon, and Minhla (Magwe). The distribution now extends to include Sagaing Division and Chin State.

Chin State: 221878; Sagaing Division: 215359, 215377, 215414, 215459, 215714, 215744, 215758, 215761, 215772, 215779–80, 215783–84, 215790, 215792–93, 215799, 215804–09, 215812.

Eutropis quadricarinata (Anderson, 1871)

Previously known from Bhamo (Kachin State; Smith, 1935b) and Chattin (Sagaing Division; Zug et al., 1998). Records now exist from Mandalay Division.

Mandalay Division: 213984, 216233.

Scincella reevesi (Gray, 1838)

Smith (1935b) reports this species from Bhamo (Kachin State), Bago Division, and from the Dawna Hills (Kayin State). It has additionally been documented from Tanintharyi Division (Theobald, 1868), as well as from Mount Popa in the Mandalay Division (Shreve, 1940). We add records from Ayeyarwady and Yangon Divisions and Shan and Mon States.

Ayeyarwady Division: 213094; Mon State: 222283; Shan State: 216298, 216331, 216342, 230709, 230731; Yangon Division: 204984, 213286, 213293, 213301, 213330–31, 213335.

Tropidophorus berdmorei (Blyth, 1853)

Records for this species within Myanmar are confined to the Mergui Archipelago and Tenneserim (Tanintharyi Division), Pegu (Bago Division) and Bhamo (Kachin State; Smith 1935a). Recent records expand the known range to Sagaing Division and Shan State.

Sagaing Division: 204900–07, 210182, 210236–38; Shan State: 210639.

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