Ecological and Conservation Correlates of Rarity in New World Pitvipers

Irina Birskis-Barros 1,2, Laura R. V. Alencar 2, Paulo I. Prado 2, Monika Böhm 3 and   
Marcio Martins 2,\*

1 School of Natural Sciences, University of California, Merced, CA 95340, USA

2 Departamento de Ecologia, Instituto de Biociências, Universidade de São Paulo, 05508-09 São Paulo, SP, Brazil

3 Institute of Zoology, Zoological Society of London, Regent’s Park, London NW1 4RY, UK

**\*** Correspondence: martinsmrc@usp.br; Tel.: +55-11-30918470

Supplementary tables

**Table S1. -** Sources of locality data used to calculate Geographical range for New World vipers.

|  |  |  |
| --- | --- | --- |
| **Species** | **Museums** | **References** |
| *Agkistrodon bilineatus* |  | Porras et al. (2013) |
| *Agkistrodon contortrix* | VertNet: CAS, CM, CUMV, FHSM, LACM, MCZ, MVZ, NCSM, PSM, ROM, SDNHM, SLU, SMNS, TCWC, UTEP |  |
| *Agkistrodon howardgloydi* |  | Porras et al. (2013) |
| *Agkistrodon piscivorus* | VertNet: CAS, CLO, CM, CUMV, GSU, LACM, MVZ, ROM, SDNHM, SLU, TCWC, UBCBBM, UTEP, UWBM |  |
| *Agkistrodon russeolus* |  | Porras et al. (2013) |
| *Agkistrodon taylori* |  | Burchfield (1982), Gloyd e Connant (1990) |
| *Atropoides indomitus* |  | Smith & Ferrari-Castro (2008) |
| *Atropoides mexicanus* |  | Smith & Ferrari-Castro (2008) |
| *Atropoides nummifer* |  | Smith & Ferrari-Castro (2008) |
| *Atropoides occiduus* |  | Smith & Ferrari-Castro (2008) |
| *Atropoides olmec* |  | Smith & Ferrari-Castro (2008) |
| *Atropoides picadoi* |  | Smith & Ferrari-Castro (2008) |
| *Bothriechis aurifer* |  | Campbell & Smith (2000) |
| *Bothriechis bicolor* |  | Campbell & Smith (2000) |
| *Bothriechis guifarroi* |  | Townsend et al. (2013) |
| *Bothriechis lateralis* | MZUCR; Herpnet: CM, MCZ | Dunn (1940, 1947), Campbell & Smith (2000), Fernandes et al. (2004), Laurencio (2007) |
| *Bothriechis marchi* |  | Wilson & McCranie (1992, 2003), Campbell & Smith (2000), McCranie & Castañeda (2005), Townsend et al. (2006), Field & Long (2007) |
| *Bothriechis nigroviridis* |  | Dunn (1940, 1947), Savage (1966), Solórzano (1997), Parkinson (1999), Campbell & Smith (2000), Taggart et al. (2001), Fern&es et al. (2004), Castoe et al. (2006, 2009), Jadin et al. (2011) |
| *Bothriechis rowleyi* |  | Campbell & Smith (2000) |
| *Bothriechis schlegelii* | VertNet: CAS, CM, LACM, LSUMZ, MCZ, MVZ, SMNS, TCWC, USNM, YPM HERR | Taylor (1951) Stuart (1963), Heyer (1967), Silva & Sites (1995), Solórzano et al. (1998), Parkinson (1999), Campbell & Smith (2000), Bonham (2001), Taggart et al. (2001), Wilson & McCranie (2003), McCranie & Castañeda (2005), Castoe & Parkinson (2006), Whiles et al. (2006), Laurencio (2007), Abellá et al. (2008), Castro-Herrera & Vargas-Salinas (2008), Smith & Ferrari-Castro (2008), Castoe et al. (2009), Lennan (2009), Meza-Ramos et al. (2009), Ortega-&rade et al. (2010), Jadin et al. (2011), Medina-Rangel (2011), Alvarado (2012), Carrasco et al. (2012), Rivas et al. (2012) |
| *Bothriechis supraciliaris* |  | Solórzano et al. (1998), Campbell & Smith (2000), Castoe et al. (2009), Jadin et al. (2011), Fenwick et al. (2012), |
| *Bothriechis thalassinus* | VertNet: ROM, USNM | Campbell & Smith (2000), Wilson & McCranie (2003) |
| *Bothrocophias andianus* | VertNet: KU, MCZ, MCZR, USNM | Harvey et al. (2005), Fenwick et al. (2009), Carrasco et al. (2010), Calle et al. (2011), Carrasco et al. (2012) |
| *Bothrocophias campbelli* | Herpnet: USNM | Freire & Kuch (2000), Wüster et al. (2002), Castro et al. (2005), Cisneros-Heredia et al. (2006), Fenwick et al. (2009), Guerrer & Haro (2012) |
| *Bothrocophias colombianus* | Herpnet: TCWC | Silva et al. (1985), Barrio-Amorós & Rodriguéz (2010), Folleco-Fernandes (2010), Guerrer & Haro (2012) |
| *Bothrocophias hyoprora* | FHGO, FMNH, INHMT, KU, MHNUC, USNM; Herpnet: USNM | Neill (1966), Duellman & Mendelson (1995), Parkinson (1999), Gutberlet & Campbell (2001), Campbell & Lamar (2004), Castoe & Parkinson (2006), Cisneros-Heredia et al. (2006), Vigle (2008), Wüster et al. (2008), Castoe et al. (2009), Fenwick et al. (2009), Bernarde et al. (2011), Bernarde et al. (2012), Carrasco et al. (2012), Wüster et al. (2012) |
| *Bothrocophias microphthalmus* | Herpnet: KU, LACM, USNM | Gutberlet & Campbell (2001), Wüster et al. (2002), Harvey et al. (2005), Cisneros-Heredia et al. (2006), Fenwick et al. (2009), Bernarde et al. (2012), Carrasco et al. (2012) |
| *Bothrocophias myersi* | Herpnet: KU, USNM | Gutberlet & Campbell (2001), Castro-Herrera & Vargas-Salinas (2008), Fenwick et al. (2009) |
| *Bothrops alcatraz* | MZSP |  |
| *Bothrops alternatus* | CHUFSC, DZURGS, FURB, IBSP, IVB, MCNR, MCP, MHNCI, MNRJ, MZSP, ZUEC, UFOP; Herpnet: CAS, CM, LACM, LSU, MCZ, MSUM, MVZ, TCWC, UCM, USNM | Ihering (1911), Magalhães (1925), Amaral (1934), Vanzolini & Brandão (1946), Hoge & Belluomini (1962), Amaral (1977), Alvarez et al. (1995), Chebéz (1996), Yanosky et al. (1996), Salomão et al. (1997), Wüster et al. (2002), Melgarejo (2003), Kacoliris et al. (2006), Leynaud et al. (2006), Quintela et al. (2006), Zanella & Cechin (2006), Deiques et al. (2007), Giraudo et al. (2008), Leynaud et al. (2008), Sawaya et al. (2008), Álvares et al. (2009), Fenwick et al. (2009), Valdujo et al. (2009), Cola & Chiaraviglio (2011), Jadin et al. (2011), Prigioni et al. (2011), Carrasco et al. (2012) |
| *Bothrops ammodytoides* | Herpnet: LACM, MCZ, MSUM, MVZ, USNM | Avila et al. (1998), Acosta & Murúa (1998), Lenk et al. (2001), Kacoliris et al. (2006), Leynaud et al. (2008), Fenwick et al. (2009), Carrasco et al. (2010), Cola & Chiaraviglio (2011), Carrasco et al. (2012) |
| *Bothrops asper* | Herpnet: CAS, CM, IBUNAM, KU, LACM, LSU, MCZ, MPM, MVZ, OMNH, SDNHM, TCWC, UAZ, UCM, USNM, UTEP, YPM | Taylor (1950), Stuart (1963), Guyer & Donnelly (1990), Russell et al. (1997), Hofer & Bersier (2001), Wilson & McCranie (2003), McCranie & Castañeda (2005), Canseco-Marquez & Mayen (2006), Townsend et al. (2006), Carvajal-Cogollo et al. (2007), Field & Long (2007),Laurencio (2007), Mayén & Arenas (2007), Abellá et al. (2008), Calderón-Mandujano et al. (2008), Castro-Herrera & Vargas-Salinas (2008), Santos-Barrera et al. (2008), Smith & Ferrari-Castro (2008), Wüster et al. (2008), Fenwick et al. (2009), Lennan (2009), Roldan & Macero (2009), Sasa et al. (2009), Folleco-Fernandes (2010), Ortega-Andrade et al. (2010),Ramírez-Bautista et al. (2010), Rueda-Solano & Castellanos-Barliza (2010), Medina-Rangel (2011), Vargas-Salinas et al. (2011), Alvarado (2012), Rivas et al. (2012) |
| *Bothrops atrox* | FPR, IBSP, MHNCI, MBML, MNRJ, MZUEL, UFAC, ZUEC; Herpnet: CM, IBUNAM, KU, LSU, OMNH, MCZ, MPM, MSUM, MVZ, ROM, SDNHM, SMNS, TCWC, UCM, UMNH, USNM | Brown (1893), Schimidt & Walker (1943a), Amaral (1935), Mole & Urich (1894), Parker (1935), Stuart (1935), Huey (1942), Taylor (1951), Smith & Darling (1952), Gates (1957), Sexton (1958), Dixon et al. (1962), Pough (1966), Heyer (1967), Landreth (1973), King (1975), Fugler & Walls (1978), Best & James (1983), Thayer (1988), Pisani & Stephenson (1991), Duellman & Mendelson (1995), Wüster et al. (1996), Reynolds & Icochea (1997), Icochea et al. (2001), Oliveira & Martins (2001), Doan & Arriaga (2002), Wüster et al. (2002), Dugan & Melanson (2005), Frota et al. (2005), Harvey et al. (2005), Cisneros-Heredia et al. (2006), Bernarde & Abe (2006), Valencia-Hernández et al. (2007), Vigle (2008), Avila-Pires et al. (2009), Fenwick et al. (2009), Lazcano et al. (2009), Turci et al. (2009), Avila-Pires et al. (2010), Carrasco et al. (2010), Daza (2010), Ramírez-Bautista et al. (2010), Calle & Aguilar-Kirigin (2011), Bernard et al. (2012), Rivas et al. (2012) |
| *Bothrops ayerbei* |  | Folleco-Fernandes (2010) |
| *Bothrops barnetti* | Herpnet: CAS, LSU | Fenwick et al. (2009), Carrasco et al. (2012) |
| *Bothrops bilineatus* | CZGB, FPR, IBSP, IVB, MBML, MHNCI, MZ,MZUESC, ZUEC; Herpnet: KU, LACM, LSU, MCZ, TCWC, USNM | Parker (1935), Greene & Campbell (1972), Cunha & Nascimento (1978), Silva & Sites (1995), Franco & Sugliano (1998), Parkinson (1999), Doan & Arriaga (2002), Feio & Caramaschi (2002), Wüster et al. (2002), Argôlo (2004), Bernarde (2004), Frota et al. (2005), Harvey et al. (2005), Bernarde & Abe (2006), Castoe & Parkinson (2006), Cisneros-Heredia et al. (2006), Turci & Bernarde (2008), Vigle (2008), Avila-Pires et al. (2009), Castoe et al. (2009), Fenwick et al. (2009), Turci et al. (2009), Bernarde et al. (2011), Bernarde et al. (2012), Rivas et al. (2012) |
| *Bothrops brazili* | Herpnet: AMNH, MVZ, ROM, TCWC, USNM, UTA | Parker (1935), Cunha & Nascimento (1978), Silva & Sites (1995), Wüster et al. (2002), Cisneros-Heredia et al. (2006), França et al. (2006), Fenwick et al. (2009), Bernarde et al. (2012) |
| *Bothrops caribbaeus* | Herpnet: MCZ, USNM, UTA | Lazell (1964), Russell et al. (1997), Fenwick et al. (2009) |
| *Bothrops chloromelas* | Herpnet: MCZ | Harvey et al. (2005), Fenwick et al. (2009), Carrasco et al. (2012) |
| *Bothrops cotiara* | CHUFSC, DZURGS, IBSP, MCN, MCP, MHNCI, MNRJ, MZUSP | Gomes (1913), Amaral (1934, 1977), Amaral (1934), Hoge & Belluomini (1962), Chebez (1996), Salomão et al. (1997), Wüster et al. (2002), Bérnils et al. (2004), Deiques et al. (2007), Kunz & Ghizoni (2009), Carrasco et al. (2010) |
| *Bothrops diporus* | CHUFSC, FURB, MHNCI; Herpnet: CM, MCZ, LACM, TCWC, USNM, | Alvarez et al. (1995), Acosta & Murúa (1998), Avila et al. (1998), Alvarez et al. (2002), Arzamendia & Giraudo (2002), Giraudo & Scrocchi (2002), Castoe & Parkinson (2006), Kacoliris et al. (2006), Leynaud et al. (2006), Giraudo et al. (2008), Leynaud et al. (2008), Silva & Rodrigues (2008), Álvares et al. (2009), Castoe et al. (2009), Fenwick et al. (2009), López & Naze (2009), Daza (2010), Cola & Chiaraviglio (2011), Jadin et al. (2011), Carrasco et al. (2012) |
| *Bothrops erythromelas* | CHBEZ, CHUFC, CHUFS, CHUNB, IBSP, IVB, MNRJ, MPEG, MUFAL, MZUFBA, MZUSP, UFPB | Parkinson (1999), Wüster et al. (2002), Castoe et al. (2009), Daza (2010), Jadin et al. (2011) |
| *Bothrops fonsecai* | IBSP, IVB, MNRJ, MZUSP, ZUEC | Hoge & Belluomini (1962), Manzani et al. (1997), Wüster et al. (2002) |
| *Bothrops insularis* | MZUSP | Salomão et al. (1997), Castoe & Parkinson (2006), Daza (2010) |
| *Bothrops itapetiningae* | CEPB, CHUNB, IBSP, MHNCI, MZUSP, UFU, ZUEC | Boulenger (1907), Ihering (1911), Amaral (1977), Wüster et al. (2002), Sawaya et al. (2008) |
| *Bothrops jararaca* | CCNG, CHUFSC, FURB, IVB, LMZ, MBML, MCNR, MCP, MHNCI, MZSP, MZUFV, UFJF, UFMG, UFOP, USPRP, ZUEC, ZUFRJ; Herpnet: CM, LACM, MVZ, UAM, USNM | (1905), Vanzolini (1948), Hoge (1952), Amaral (1977), Lema, 1987, Bérnils & Moura-Leite(1990), Sazima & Haddad (1992), Chebez (1996), Hoogmoed (1997), Salomão et al. (1997), Franco & Sugliano (1998), Bernarde & Machado (2002), Feio & Caramaschi (2002) Marques et al. (2002), Argôlo (2004), Marques & Sazima, (2004), Hartmann (2005), Dixo & Verdade (2006), Grazziotin et al. (2006), Cicchi et al. (2007), Deiques et al. (2007), Hamdan et al. (2007), Centeno (2008), Hartmann & Giasson (2008), Pontes et al. (2008), Rocha et al. (2008), Kunz & Ghizoni-Jr (2009) López & Nazer (2009), Palmuti et al. (2009), São Pedro & Pires (2009), Carrasco et al. (2010) |
| *Bothrops jararacussu* | CCNG, CHUFSC, CZGB, DZURGS, FUNED, FURB, IBSP, IVB, LMZ, MBML, MCN, MCP, MHNCI, MNRJ, MZUESC, MZSP,MZUFV, UFMG, ZUEC, ZUFRJ; Herpnet: CM, KU, LACM, MVZ, USNM | Ihering (1911), Amaral (1977), Lema & Araujo (1980), Chebez (1996), Salomão et al. (1997), Bernarde & Machado (2002), Marques et al. (2004), Marques & Sazima (2004), Hartmann (2005), Rocha & Sluys (2006), Cicchi et al. (2007), Gutsche et al. (2007), Centeno et al. (2008), Pontes et al. (2008), Rocha et al. (2008), Fenwick et al. (2009), Kunz & Ghizoni-Jr (2009), López & Nazer (2009), Palmuti et al. (2009), Carrasco et al. (2010) |
| *Bothrops jonathani* |  | Harvey (1994), Harvey et al. (2005), Carrasco et al. (2009), Fenwick et al. (2009), Carrasco et al. (2012) |
| *Bothrops lanceolatus* | Herpnet: MCZ, USNM | Lazell (1964), Russell et al. (1997), Loverlec et al. (2007), Fenwick et al. (2009), |
| *Bothrops leucurus* | IBSP, MBML, MCNR, MHNCI, MZUFBA, MZUSP, ZUEC | Wüster et al. (2002) |
| *Bothrops lojanus* | Herpnet: KU, USNM | Cisneros-Heredia & Touzet ( 2004) |
| *Bothrops lutzi* | CHUFC, CHUNB, IBSP, MNRJ, MZSP, ZUEC | Silva (2000), Silva & Rodrigues (2008) |
| *Bothrops marajoensis* | IBSP | Cunha & Nascimento (1978), Wüster et al. (2002) |
| *Bothrops marmoratus* |  | Silva (2000), Silva & Rodrigues (2008) |
| *Bothrops matogrossensis* | Herpnet: CM | Strussman & Saazima (1993), Silva (2000), Giraudo & Scrocchi (2002), Campbell & Lamar (2004), França et al. (2006), Monteiro et al. (2006), Silva & Rodrigues (2008), Fenwick et al. (2009), Calle & Aguilar-Kirigin (2011), Bernarde et al. (2012) |
| *Bothrops medusa* |  |  |
| *Bothrops moojeni* | CHUNB, DZURGS, IBSP, IVB, LMZ,MCNR, MCP, MHNCI, MZUFV, MZUSP, UFMG, USNM, ZUEC; Herpnet: USNM | Brites & Bauab (1988), Vanzolini (1991), Chebez (1996), Wüster et al. (2002), Harvey et al. (2005), Van-Silva et al. (2007), Sawaya et al. (2008) |
| *Bothrops muriciensis* |  | Freitas et al. (2012) |
| *Bothrops neuwiedi* | CCNG, CHUFSC, CHUNB, FURB, IBSP, LMZ, MHNCI, MNRJ, MZSP, MZUFBA, MZUFV, UFJF | Muller (1885), Amaral (1925, 1933a), Fernandes & Abe (1991), Yanosky et al. (1996), Silva (2000), Wüster et al. (2002), Harvey et al. (2005), Silva & Rodrigues (2008), Castoe et al. (2009), Kunz & Ghizoni-Jr (2009), França et al. (2012) |
| *Bothrops oligolepis* | Herpnet: CM, LSU | Harvey et al. (2005), Carrasco et al. (2012) |
| *Bothrops osbornei* | Herpnet: USNM | Wüster et al. (2002), Fenwick et al. (2009), Fenwick et al. (2012) |
| *Bothrops otavioi* |  |  |
| *Bothrops pauloensis* | IBSP, IVB, MHNCI, MNRJ, MZSP, ZUEC | Amaral (1925, 1933a), Vanzolini (1948), Silva (2000), Valdujo et al. (2002), Van-Silva et al. (2007), Sawaya et al. (2008), Silva & Rodrigues (2008) |
| *Bothrops pictus* |  | Schmidt & Walker (1943), Wüster et al. (2002), Fenwick et al. (2009), Carrasco et al. (2010, 2012), Fenwick et al. (2012) |
| *Bothrops pirajai* | CZGB, IBSP, MZUESC |  |
| *Bothrops pubescens* | CHUFSC, MHNCI; Herpnet: CM, YPM | Amaral (1925), Fernandes & Abe (1991), Carreira et al. (2005), Silva & Rodrigues (2008), Prigioni et al. (2011), Fenwick et al. (2012) |
| *Bothrops pulcher* | Herpnet: KU, MCZ, USNM | Harvey et al. (2005), Cisneros-Heredia et al. (2006), Carrasco et al. (2012) |
| *Bothrops punctatus* | Herpnet: CAS, USNM | Castro-Herrera & Vargas-Salinas (2008), Fenwick et al. (2009) |
| *Bothrops rhombeatus* |  | Folleco-Fernandes (2010) |
| *Bothrops sanctaecrucis* | Herpnet: CM, MCZ, USNM | Harvey et al. (2005), Fenwick et al. (2009), Calle & Aguilar-Kirigin (2011), Carrasco et al. (2012) |
| *Bothrops taeniatus* | Herpnet: FMNH, MCZ, MVZ, USNM | Fugler & Walls (1978), Jorge da Silva et al. (1995), Reynolds & Icochea (1997), Salomão et al. (1997), Wüster et al. (2002), Campbell & Lamar (2004), Frota et al. (2005), Harvey et al. (2005), Cisneros-Heredia et al. (2006), MacCulloch et al. (2007), Avila-Pires et al. (2009), Fenwick et al. (2009), Furtado et al. (2010), Bernarde et al. (2012), Rivas et al. (2012) |
| *Bothrops venezuelensis* | Herpnet: TCWC, USNM | Silva et al. (1998), Lotzkat (2007), Carrasco et al. (2012), Mendoza et al. (2012), Rivas et al. (2012) |
| *Cerrophidion godmani* |  | Dunn (1947), Wilson & McCranie (2003), Castoe et al. (2009), Jadin et al. (2011) |
| *Cerrophidion petlalcalensis* |  | Lopez-Luna et a. (1999) |
| *Cerrophidion sasai* |  | Jadin et al. (2012) |
| *Cerrophidion tzotzilorum* |  | Csorba et al. (2004), Castoe et al. (2005, 2009), Jadin (2007, 2010), Daza (2010), Jadin et al. (2012), |
| *Cerrphidion wilsoni* |  | Jadin et al. (2012) |
| *Crotalus adamanteus* | FLMNH. VertNet: CAS, CM, CUMV, FHSM, KU, LACM, MCZ, MVZ, OSUM, SDNHM, SMNS, USNM, UTEP |  |
| *Crotalus angelensis* |  | Grismer (2002) |
| *Crotalus aquilus* | VertNet: MVZ | Valencia-Hernández et al. (2007), Ramírez-Bautista et al. (2010), Bryson et al. (2014) |
| *Crotalus armstrongi* |  | Bryson et al. (2014) |
| *Crotalus atrox* |  | Carol Spencer (unpublished data) |
| *Crotalus basiliscus* | Vertnet: CAS, CM, KU, LACM, MCZ, MVZ, RBINS, ROM, SDNHM, TCWC, UAZ, UCM, UTEP |  |
| *Crotalus caliginis* |  | Grismer (2002) |
| *Crotalus campbelli* |  | Bryson et al. (2014) |
| *Crotalus catalinensis* |  | Grismer (2002) |
| *Crotalus cerastes* | VertNet: ROM, SDNHM, UBCBBM, UCM, UF, UMNH, UAMZ, USNM, UTEP, UWBM, YPM | Cunningham (1959), Funk (1965), Brown & Lillywhite (1992), SECOR (1995), Mulkahy et al. (2003), Douglas et al. (2006), Lyman (2006), Coupe & Dawson (2007), Daza (2010) |
| *Crotalus cerberus* | VertNet: CAS, CM, LACM | Hulse (1973) |
| *Crotalus culminatus* |  | Klauber (1952), Davies & Smith (1953), McCranie (1993) |
| *Crotalus durissus* | CHUFC, CHUFSC, CHUNB, FURB, IBSP, IVB, LMZ, MCN, MCNR, MCP, MHNCI, MUFAL, MZSP, MZUFV, UFJF, UFMG, UFOP, USPRP, ZUEC | Amaral (1933b), Stuart (1935), Vanzolini (1948), Chebez (1966), Lema (1987), Bérnils & Moura-Leite (1990), Sazima & Haddad (1992), McCranie (1993), Salomão et al. (1997), Bernarde & Machado (2002), Wüster et al. (2002), Campbell & Lamar (2004), Bastos et al. (2005), Carreira et al. (2005), Frota et al. (2005), Hartmann (2005), Harvey et al. (2005), Wüster et al. (2005), Leynaud et al. (2006), Deiques et al. (2007), Laurencio (2007), Van-Silva et al. (2007), Centeno et al. (2008), Leynaud et al. (2008), Mejía (2008), Sawaya et al. (2008), Kunz & Ghizoni-Jr (2009), López & Nazer (2009), Bonilla et al. (2010), Rueda-Solano & Castellanos-Barliza (2010), Giraudo et al. (2011), Martín-Regalado et al. (2011), Medina-Rangel (2011), Prigioni et al. (2011), Bernarde et al. (2012), Carrasco et al. (2012), Larreal et al. (2012), Rivas et al. (2012) |
| *Crotalus enyo* |  | C. Estrada & Gustavo Arnaud (unpublished data) |
| *Crotalus ericsmithi* |  | Campbell & Flores-Villela (2008) |
| *Crotalus estebanensis* |  | Grismer (2002) |
| *Crotalus horridus* | VertNet: CAS, CM, CUMV, LACM, MCZ, MSB, MVZ, PSM, ROM, SDNHM, UCM, UF, USNM, UTEP, YPM | Dunn (1915), King (1939), Swanson (1939), Minton & Minton (1948), Smyth (1949), Barbour (1950), Cliburn (1968), Savage (1967), Klauber (1972), Keenline (1982), Gibbons & Cocker (1978), Fitch (1982, 1999), Reinert (1984), Reinert et al. (1984), Jones et al. (2000), Coupe (2001), Parmley & Parmley (2001), Fitch et al. (2004), Foz & Hamilton (2007), Fenwick et al. (2012) |
| *Crotalus intermedius* | VertNet: MVZ | Lynch & Smith (1966), Dávila et al. (2002), Campbell & Lamar (2004), Valencia-Hernández Et al. (2007), Márquez & Mayén (2010), Bryson et al. (2006, 2011) |
| *Crotalus lannomi* |  | Reyes-Vellasco et al. (2013) |
| *Crotalus lepidus* | VertNet: BYU, CAS, CM, CUMV, LACM, MSB, MVZ, NCSM, ROM, SDNHM, UCM, USNM, UTEP, YPM | Campbell & Lamar (2004) |
| *Crotalus lorenzoensis* |  | Grismer (2002) |
| *Crotalus mitchelii* |  | Gustavo Arnaud (pers. comm.) |
| *Crotalus molossus* | VertNet: CAS, CM, CUMV, LACM, MSB, MVZ, NCSM, PSM, ROM, SDNHM, UCM, USNM, UTEP |  |
| *Crotalus muertensis* |  | Grismer (2002) |
| *Crotalus oreganus* | VertNet: LACM, MCZ, MSB, MVZ, SDNHM, UBCBBM, UMNH, UTEP, UWBM |  |
| *Crotalus ornatus* |  | Anderson & Greenbaun (2012) |
| *Crotalus polystictus* |  | Meik et al. (2012) |
| *Crotalus pricei* | VertNet: CM, CUMV, MVZ, ROM, SDNHM, UAMZ, UTEP | Klauber (1972), Bryson et al. (2002), Bryson et al. (2012) |
| *Crotalus pussillus* |  | Bryson et al. (2014) |
| *Crotalus pyrrhus* | VertNet: CAS, CM, MSB, MVZ, PSM, ROM, SDNHM, UCM, USNM, UTEP | Douglas et al. (2007) |
| *Crotalus ravus* |  | Davis & Smith (1953), Campbell & Armstrong (1979), Parkinson (1999), Peterson et al. (2004), Castoe & Parkinson (2006), Valencia-Hernández et al. (2007), Daza (2010), Márquez & Mayén (2010), Ramírez-Bautista et al. (2010), Jadin et al. (2011) |
| *Crotalus ruber* | VertNet: CAS, CM, LACM, MCZ, MSB, MVZ, NCSM, ROM, SDNHM, UCM, USNM, UTEP | Tevis (1943), Klauber (1972), Patten & Banta (1980), Grismer (2002), Castoe & Parkinson (2006), Douglas et al. (2006), Castoe et al. (2009), Daza (2010), Jadin et al. (2011) |
| *Crotalus scutulatus* | VertNet: CAS, CM, CUMV, LACM, MSB, MVZ, NCSM, ROM, SDNHM, UCM, UAMZ, USNM, UTEP, YPM | Huey (1942), Dixon et al. (1962), Pough (1966), Klauber (1972), Brown et al. (2000), Valencia-Hernández (2007), Contreras-Lozano (2010), Márquez & Mayén (2010), Ramírez-Bautista (2010), Fenwick et al. (2012) |
| *Crotalus simus* | VertNet: CM, LACM, MCZ, MVZ, USNM | Reyna-Alvarez et al. (2010), Alvarado (2012), Yañez-Arenas et al. (2014) |
| *Crotalus stejnegeri* |  | Dunn et al. (1919), Heiden & Flores-Villela (2013), Reyes-Vellasco et al. (2013) |
| *Crotalus stephensi* |  | Douglas et al. (2007) |
| *Crotalus tancitarensis* |  | Alvarado-Diaz & Campbell (2004) |
| *Crotalus tigris* | Vertnet: CM, LACM, MCZ, MVZ, NCSM, ROM, UTEP, YPM | Gloyd (1937), Parkinson (1999), Douglas et al. (2006), Castoe et al. (2009), Daza (2010), Jadin et al. (2011), |
| *Crotalus tlaloci* |  | Bryson et al. (2014) |
| *Crotalus tortugensis* |  | Grismer (2002) |
| *Crotalus totonacus* |  | Taylor (1950), McCranie (1993), Valencia-Hernández et al. (2007), Lazcano et al. (2009a, b), Ramírez-Bautista et al. (2010) |
| *Crotalus transversus* |  | Armstrong & Murphy (1979), Bryson et al. (2011) |
| *Crotalus triseriatus* |  | Gloyd (1937), Davis & Smith (1953), Castoe et al. (2006, 2009), Daza (2010), Ramírez-Bautista et al. (2010), Medina-Aguilar et al. (2011), Bryson et al. (2014) |
| *Crotalus tzabcan* |  | Klauber (1952), Neill & Allen (1959), Stuart (1963), Duellman (1965), McCranie (1993), Wüster et al. (2002), Luja et al. (2005), Daza (2010) |
| *Crotalus unicolor* |  | Reinert et al. (2002) |
| *Crotalus viridis* | VertNet: CAS, CM, CUMV, LACM, MCZ, MSB, MVZ, NCSM, PSM, ROM, SDNHM, UCM, UF, UAMZ, USNM, UTEP, UWBM, YPM | Schmidt & Owens (1944), Staber (1948), Mosimann & Rabb (1952), Cunningham (1959), Klauber (1972), Genter (1984), Duvall et al. (1985), Diller & Johnson (1988), Chiszar et al. (1993), Marti et al. (1993), Hill et al. (2001), Grismer (2002), Wüster et al. (2002), Giovanni et al. (2005), Jorgensen & Gates (2007), Fenwick et al. (2012) |
| *Crotalus willardi* | VertNet: CM, LACM, MVZ, UTEP | Martin (1985), Parker & Stotz (1977), Rado & Rowlands (1981), Rossi & Feldner (1993), Stidham (2001), Hollycross et al. (2002), Lemos-Spinal et al. (2007), Castoe et al. (2009), Daza (2010), Fenwick et al. (2012), |
| *Lachesis acrochorda* | VertNet: KU | Ortega-Andrade et al. (2010), Medina-Rangel (2011), Henke (2012) |
| *Lachesis melanocephala* | VertNet: KU, LACM, MVZ, | Solórzano & Cerdas (1986), Zamudio & Greene (1997), Campbell & Lamar (2004), Fernandes et al. (2004), González-Maya et al. (2014) |
| *Lachesis muta* | CHUFC, FUNED, IBSP, IVB, MBML, MCP, MPEG, MZSP, MZUFV; Herpnet: CM, CUMV, KU, LACM, LSU, MCZ, MPM, MVZ, OMNH, SDNHM, SDNHM, SMNS, USNM | Mole & Urich (1894), Cunha & Nascimento (1978), Guyer & Donnelly (1990), Kraus et al. (1996), Russell et al. (1997), Zamudio & Greene, (1997), Franco & Sugliano (1998), Feio & Caramaschi (2002), Argôlo (2004), Fernandes et al. (2004), Dias & Rocha (2005), Harvey et al. (2005), Bernardes & Abe (2006), Cisneros-Heredia et al. (2006), Sanz et al. (2008), Vigle (2008), Avila-Pires et al. (2009), França & Venâncio (2010), Bernarde et al. (2012), Rivas et al. (2012) |
| *Lachesis stenophrys* | VertNet: CM, LACM, MVZ | Campbell & Lamar (2004) |
| *Mixcoatlus barbouri* |  | Campbell (1988), Jadin et al. (2011) |
| *Mixcoatlus browni* |  | Jadin et al. (2011) |
| *Mixcoatlus melanurus* |  | Campbell & Lamar (2004), Márquez & Mayén (2010) |
| *Ophryacus undulatus* | VertNet: TCWC, UCM, USNM | Lynch & Smith (1966), Flores-Villela & Sánchez (2003), Campbell & Lamar (2004), Canseco-Márquez & Mendoza-Quijano (2007), Márquez & Mayén (2010), Ramírez-Bautista et al. (2010) |
| *Porthidium arcosae* |  | Wüster et al. (2002), Castoe et al. (2009), Daza (2010), Valencia et al. (2010), Jadin et al. (2011) |
| *Porthidium dunni* | VertNet: CAS, TCWC, UCM, USNM | Lynch & Smith (1966), Campbell (1976), Muñoz-Alonso (2007), Castoe et al. (2009), Daza (2010), Jadin et al. (2011) |
| *Porthidium hespere* |  | Campbell (1976), Alvarado-Diaz (1997), Campbell & Lamar (2004) |
| *Porthidium lansbergii* | HerpNet: CAS, CM, FMNH, MVZ, USNM | Swansin (1945), Taylor (1951), Campbell (1976), Carvajal-Cogollo (2007), Wüster et al (2008), Castoe et al. (2009), Infante-Rivero (2009), Bonilla et al. (2010), Rueda-Solano & Castellanos-Barliza (2010), Rivas et al. (2012) |
| *Porthidium nasutum* | HerpNet: CAS, KU, LACM, MVZ, ROM, UCM, USNM | Taylor (1951), Wilson & McCranie (1982, 2003), Cisneros-Heredia & Yánez-Muñoz (2005), Laurencio (2007), Lee & Calderón Mandujano (2007), Castro-Herrera & Vargas-Salinas (2008), Santos-Barrera et al. (2008), Smith & Ferrari-Castro (2008), Lennan (2009), Daza (2010), Castoe et al. (2009) |
| *Porthidium ophryomegas* | VertNet: LACM, KU, LSU, USNM | Taylor (1951), Campbell (1976), Lawson (1997), Wilson & McCranie (2003), Meija (2008), Wüster et al. (2008), Lennan (2009), Alvarado (2010), Daza (2010), |
| *Porthidium porrasi* |  | Castoe et al. (2009), Daza (2010) |
| *Porthidium volcanicum* |  | Solórzano (1994) |
| *Porthidium yucatanicum* | VertNet: KU, UCM, USNM | Campbell (1976), Campbell & Lamar (2004), Lee & Calderón M&ujano (2007), Fenwick et al. (2012) |
| *Sistrurus catenatus* | VertNet: ASNHC, BLB, BYU, CAS, CM, CMN, CUMV, KU, LACM, MCZ, MSB, MVZ, NBMB, NCSM, OSUM, OMNH, ROM, SDNHM, SMNS, TCWC, UBCBBM, UCM, USNM, UTEP, YPM | Taylor (1892), Evermann & Clarck (1914), Leray (1930), Swanson (1939), Wright (1941), Keenlyne & Beer (1973), Seigel (1986), Applegate (1995), Mauger & Wilson (1999), Parkinson (1999), Seigel & Pilgrim (2002), Castoe & Parkinson (2006), Engelbert & Patrick (2007), Castoe et al. (2009), Daza (2010), Jadin et al. (2011), |
| *Sistrurus miliarius* | VertNet: ASNHC, BLB, CAS, CM, CMN, CUMV, FHSM, GSU, KU, LACM, LSUMZ, MCZ, MVZ, NBMB, OSUM, OMNH, QM, ROM, SDNHM, SLU, SMNS, TCWC, UCM, UF,UAMZ, USNM, UTEP, YPM | Minton & Minton (1948), Cliburn (1958), Palmer & Williamson (1971), Klauber (1972), Ford et al. (1990), Bernardino & Dalrymple (1992), Trauth et al. (1994), Kraus et al. (1996), Rabatsky & Farrell (1996), May et al. (1999), Parkinson (1999), Crosswhite et al. (2004), Castoe & Parkinson (2006), Castoe et al. (2009), Perry et al. (2009), Daza (2010), Jadin et al. (2011), |

Museums abbreviations cited in Table S1:

|  |  |
| --- | --- |
| **Acronym** | **Institution** |
| AMNH | American Museum of Natural History, New York |
| ASNHC | Angelo State University |
| BLB | Borror Laboratory of Bioacoustics |
| BYU | Monte L. Bean Museum, Brigham Young University |
| CAS | California Academy of Sciences |
| CCNG | Coleção Carlos Nicolau Gofferjé, Universidade do Vale do Itajaí |
| CEPB | Centro de Estudos e Pesquisas Biológicas da PUC Goiás |
| CHBEZ | Coleção Herpetólogica do Departamento de Botânica, Ecologia e Zoologia, Universidade Federal do Rio Grande do Norte |
| CHUFC | Coleção de Herpetologia da Universidade Federal do Ceará |
| CHUFSC | Coleções Herpetológicas da Universidade Federal de Santa Catarina, Florianopolis, Brazil |
| CHUNB | Coleção Herpetológica da Universidade de Brasília |
| CLO | Macaulay Library |
| CM | Carnegie Museum of Natural History, Pittsburgh, Pennsylvania |
| CMN | Canadian Museum of Nature |
| CUMV | Cornell University Museum of Vertebrates |
| CZGB | Colecão Zoológica Gregório Bondar, Universidade Estadual de Santa Cruz, Ilhéus |
| DZURGS | Departamento de Zoologia da Universidade Federal do Rio Grande do Sul, Brazil |
| FHGO | Fundación Herpetológica "Gustavo Orcés", Quito, Pichincha |
| FHSM | Fort Hays Sternberg Museum of Natural History |
| FMNH | Field Museum of Natural History, Geology Department (slide collection), Chicago, Illinois |
| FPR | Fundación Puerto Rastrojo, Colombia |
| FUNED | Fundação Ezequiel Dias, Belo Horizonte |
| FURB | Universidade Regional de Blumenau, Brazil |
| GSU | Georgia Southern University |
| IBSP | Instituto Butantan, Brazil |
| IBUNAM | Colección Nacional de Peces, Instituto de Biología, Universidad Nacional Autónoma de México (UNAM), Mexico City |
| INHMT | Instituto Nacional de Higiene, Guayaquil, Guayas |
| IVB | Instituto Vital Brazil |
| KU | University of Kansas Biodiversity Institute |
| LACM | Natural History Museum of Los Angeles County |
| LMZ | Laboratório e Museu de Zoologia, Universidade Federal de Minas Gerais |
| LSUMZ | Louisiana State University Museum of Natural Science |
| MBML | Museu de Biologia Professor Mello Leitão |
| MCN | Museu de Ciencias Naturais da Fundação Zoobotânica do Rio Grande do Sul |
| MCNR | Museu de Ciências Naturais, Pontifícia Universidade Católica de Minas Gerais, Belo Horizonte, Minas Gerais, Brazil |
| MCP | Museu de Ciências e Tecnologia, Pontifícia Universidade Católica do Rio Grande do Sul, Porto Alegre, Brazil |
| MCZ | Museum of Comparative Zoology, Harvard University |
| MCZR | Museo Civico di Zoologia, Comune di Roma |
| MHNCI | Museu de História Natural Capão da Imbuia, Curitiba, Brazil |
| MHNUC | Museo de Historia Natural de la Universidad de Cauca, Popayán, Colombia |
| MNRJ | Museu Nacional, Universidade Federal do Rio de Janeiro, Rio de Janeiro, Brazil |
| MPEG | Museu Paraense Emilio Goeldi, Belém |
| MPM | Milwaukee Public Museum, Vertebrate Zoology, Milwaukee, Wisconsin |
| MSB | Museum of Southwestern Biology |
| MSUM | Michigan State University Museum, East Lansing, Michigan |
| MUFAL | Museu de História Natural da Universidade Federal de Alagoas, Maceió |
| MVZ | Museum of Vertebrate Zoology, UC Berkeley |
| MZSP/MZUSP | Museu de Zoologia da Universidade de São Paulo, São Paulo, Brazil |
| MZUCR | Zoological Museum of the University of Costa Rica |
| MZUEL | Museu de Zoologia, Universidade Estadual de Londrina, Londrina |
| MZUESC | Museu de Zoologia da Universidade Estadual de Santa Cruz |
| MZUFBA | Museu de Zoologia, Universidade Federal da Bahia, Salvador |
| MZUFV | Museu de Zoologia João Moojen de Oliveira, Universidade Federal de Viçosa, Viçosa |
| NBMB | New Brunswick Museum |
| NCSM | North Carolina Museum of Natural Sciences |
| OMNH | Sam Noble Oklahoma Museum of Natural History |
| OSUM | Ohio State University |
| PSM | James R. Slater Museum of Natural History |
| QM | Queensland Museum |
| RBINS | Royal Belgian Institute of Natural Sciences |
| ROM | Royal Ontario Museum |
| SDNHM | San Diego Natural History Museum |
| SLU | Southeast Louisiana University |
| SMNS | Staatliches Museum für Naturkunde Stuttgart |
| TCWC | Texas Cooperative Wildlife Collection |
| UAM | University of Alaska Museum of the North, Fairbanks |
| UAMZ | University of Alberta Museums |
| UAZ | University of Arizona Museum of Natural History |
| UBCBBM | University of British Columbia Beaty Biodiversity Museum |
| UCM | University of Colorado Museum of Natural History |
| UF | Florida Museum of Natural History |
| UFAC | Universidade Federal do Acre, Rio Branco |
| UFJF | Universidade Federal de Juiz de Fora, Instituto de Ciências Biológicas, Departamento de Zoologia, Juiz de Fora |
| UFMG | Universidade Federal de Minas Gerais, Belo Horizonte |
| UFOP | Universidade Federal do Oeste do Pará, Brazil |
| UFPB | Departamento de Sistemática e Ecologia, Universidade Federal da Paraíba, João Pessoa |
| UFU | Universidade Federal de Uberlândia |
| UMNH | Utah Museum of Natural History, University of Utah, Salt Lake City, Utah |
| USNM | National Museum of Natural History, Smithsonian Institution |
| USPRP | Universidade de São Paulo de Riberão Preto |
| UTA | University of Texas at Arlington, Department of Biology |
| UTEP | University of Texas at El Paso Biodiversity Collections |
| UWBM | University of Washington Burke Museum |
| YPM | Yale Peabody Museum |
| ZUEC | Museu de Zoologia da Universidade Estadual de Campinas "Adão José Cardoso", Brazil |
| ZUFRJ | Departamento de Zoolgia, Instituto de Biologia, Universidade Federal do Rio de Janeiro, Rio de Janeiro |

References cited in Table S1

Abellá, I. Gómez, R., López, M. 2008. Annotated amphibian and reptiles chick-list of Pacuare Nature Reserve, Costa Rica. Boletín de la Asociación Herpetológica Española, 19, 64-67.

Acosta, J.C. & Murúa, F. 1998. Lista preliminar y estado de conservación de los reptiles del Parque Natural Ischigualacasto, San Juan, Argentina. Multequina, 7, 49-59.

Alvarado, J.G.A. 2012. La herpetofauna de un bosque premontano: diversidad de anfibios y reptiles de El Rodeo. Branesia, 77, 251-270.

Álvares, B.B., García, J.A.R., Céspedez, J.A.A.B., Hermando, J.A.V., Zaracho, H., Calamante, C.C., Aguirre, R.H. 2009. Herpetofauna, provinces of Chaco and Formosa, Chaco Oriental region, north-eastern Argentina. Check List, 5(1), 74-82.

Alvarez, B.B., Lions, M.L., Aguirre, R., Cespedez, J. & Hernando, A. 1995. Herpetofauna del area de influencia del embalse de la represa Yacyreta (Argentina, Paraguai). Facena, 11, 57-73.

Alvarez, B., Aguirre, R., Céspedez, J., Hernando, A., & Tedesco, M. 2002. Anfibios y reptiles del sistema Iberá, Corrientes, Argentina. Comunicaciones Científicas y Tecnológicas, UNNE

Alvarado-Diaz, J. & Campbell, J.A. 2004. A new montane rattlesnake (Viperidae) from Michoacan, Mexico. Herpetologica, 60(2), 281-286.

Alvarado-Diaz, J., Huacuz-Elias, D.C. & Suazo-Ortusio, I. 1997. *Porthidium hespere* (Western Hognose Viper). Herpetological Review 28(2), 98.

Amaral, A. 1925. A general consideration of snake poisoning and observations on neotropical pit-vipers. Contributions from the Harvard Institute for Tropical Biology and Medicine, 2, 56-62.

Amaral, A. 1933a. Contribuição ao conhecimento dos ofídios do Brasil V. Una nova raça de *Bothrops neuwiedii*. Memórias do Instituto Butantan, 7, 97-98.

Amaral, A. 1933b. Collecta herpetologica do nordeste do Brasil. Memórias do Instituto Butantan 8, 185-192.

Amaral, A. do 1934. Estudos sobre ophidios neotropicos. XXXI. Sobre a especie *Bothrops alternata* D. & B., 1854 (Crotalidae). Variações. Redescripção. Memórias do Instituto Butantan, 8, 161-182.

Amaral, A. do 1935 . Estudo sobre ophidios neotropicos. XXXII. Apontamentos sobre a fauna da Colombia. Memórias do Instituto Butantan, 9, 209-216.

Amaral, A. 1977. Serpentes do Brasil - Iconografia Colorida. São Paulo, Editora Melhoramentos.

Anderson, C.G. & Greenbaum. E. 2012. Phylogeography of Northern Populations of the Black-Tailed Rattlesnake (*Crotalus molossus* Baird And Girard, 1853), With the Revalidation of *C. ornatus* Hallowell, 1854. Herpetological Monographs, 26(1),19-57.

Applegate, R. 1995. *Sistrurus catenatus catenatus* (Eastern Massasauga), Food Habits. Herpetological Review, 26(4), 206.

Argôlo, A.J.S. 2004. As serpentes dos cacauais do sudeste da Bahia. Ilhéus, Editus Editora da UESC.

Armstrong, B.L. & Murphy, J.B. 1979. The Natural History of Mexican rattlesnakes. Special Publications of the Museum of Natural History University of Kansas, 5, 1-88.

Arzamendia, V., & Giraudo, A.R. 2002. Lista y distribución de los ofidios (Reptilia: Serpentes) de Santa Fe, Argentina. Cuadernos de Herpetología, 16.

Avila, L.J., Acosta, J.C. & Murúa, A.F. 1998. Herpetofauna de la provincia de San Juan, Argentina: Lista Comentada y Distribución Geográfica. Cuadernos de Herpetología, 12 (1), 11-29.

Avila-Pires, T.C.S., Hoogmoed, M.S. & Rocha, W.A.D., 2010. Notes on the Vertebrates of northern Pará, Brazil: a forgotten part of the Guianan Region, I. Herpetofauna. Boletim do Museu Paraense Emílio Goeldi Ciências Naturais, 5(1), 13-112.

Avila-Pires, T.C.S., Vitt, L.J., Sartorius, S. S. & Zani, P.A., 2009. Squamata (Reptilia) from four sites in southern Amazonia, with a biogeographic analysis of Amazonian lizards. Boletim do Museu Paraense Emílio Goeldi Ciências Naturais, 4(2), 99-118.

Barbour, R.W. 1950. The Reptiles of Big Black Moutain, Harlan County, Kentucky. Copeia, 1950(2), 100-107.

Barrio-Amorós, C.L. & Rodriguéz, C.M. 2010. Herpetofauna del Ramal de Calderas, Andes de Venezuela. In: Evaluación rapida de la biodiversidad y aspectos socioecosistémicos del Ramal de Calderas: Andes de Venezuela. Conservation International, Center for Applied Diversity Science, Arlington, 183 pp.

Bastos, E.G.D.M., de Araújo, A.F. & Silva, H.R.D. 2005. Records of the rattlesnakes *Crotalus durissus terrificus* (Laurenti) (Serpentes, Viperidae) in the State of Rio de Janeiro, Brazil: a possible case of invasion facilitated by deforestation. Revista Brasileira de Zoologia, 22(3), 812-815.

Bernarde, P.S. 2004. Composição faunística, ecologia e história natural de serpentes em uma região no sudoeste da Amazônia, Rondônia, Brasil. Ph.D. dissertation, Universidade Estadual Paulista, Instituto de Biociências de Rio Claro.

Bernarde, P.S. & Abe, A.S., 2006. A snake community at Espigão do Oeste, Rondônia, southwestern Amazon, Brazil. South American Journal of Herpetology, 1(2), 102-113.

Bernarde, P.S., Amaral, E.S. & Vale, M.A.D. 2011. Squamata, Serpentes, Viperidae, *Bothrocophias hyoprora* (Amaral, 1835): Distribution extension in the state of Acre, northern Brazil. Check List, 7, 813-814.

Bernarde, P.S., Albuquerque, S., Barros, T.O., Turci, L.C.B. 2012. Serpentes do estado de Rondônia, Brasil. Biota Neotropical, 12(3).

Bernarde, P.S. & Machado, R.A. 2002. Fauna reptiliana da bacia do rio Tibagi. A Bacia do rio Tibagi. Londrina: Edição dos Autores, 291-296.

Bernardino, F.S. & Dalrymple, G.H. 1992. Seasonal activity and road mortality of the snakes of the Pa-hay-okee wetlands of Everglades National Park, USA. Biological Conservation, 62, 71-75.

Bérnils, R.S. & Moura-Leite, J.D. 1990. A contribuição de André Mayer à história natural no Paraná (Brasil) III. Répteis. Arquivos de Biologia e Tecnologia, 33(2), 469-480.

Bérnils, R.S., Nogueira, C.C. & Xavier-da-Silva, V. 2004. Répteis. Livro vermelho da fauna ameaçada no Estado do Paraná. 2ª ed. Curitiba: Instituto Ambiental do Paraná, 497-535.

Best, T.L., James, H.C. 1983. Rattlesnakes of the Pedro Armendariz Lava Field, New Mexico. Texas Journal of Science, 35(3).

Boettger, O. 1905. Neue Reptilien aus dem Staat Parana. Zoologische Anzeiger 29(11), 373-375.

Bonham, C.A. 2001. Biodiversity and conservation of Sierra Chinajá: a rapid assessment of biophysical, socioeconomic, and management factors in Alta Verapaz, Guatemala. M.Sc. thesis, College of Forestry and Conservation, University of Montana.

Bonilla, A., López-Rojas, H., González, L.A., Machado-Alisson, A., Infante, E. & Velásquez, J. 2010. Ictiofauna y herpetofauna de los sistemas lagunares Chacopata-Bocaripo y Campoma-Buena Vista, de la Península de Araya, Estado Sucre, Venezuela. Acta Biologica Venezuelana, 30(1-2), 35-50.

Brites, V.L.D. & Bauab, F.A. 1988. Fauna ofidiana do município de Uberlândia, Minas Gerais-Brasil. I. Ocorrência na área urbana. Revista do Centro de Ciências Biomédicas Univerisdade Federal de Uberlândia, 4(1), 3-8.

Brown, A.E. 1893. Notes on Some Snakes from Tropical America Lately Living in the Collection of theZoological Society of Philadelphia. Proceedings of the Academy of Natural Sciences of Philadelphia, 45(3), 429-435.

Brown, J.F.W, Marden, W.M. & Hardy, D.L. 2000. *Crotalus scutulatus scutulatus*. Defensive Bahavior. Herpetological Review, 31(1), 45.

Brown, T.W. & Lillywhite, H. B.1992. Autecology of the Mojave Desert Sidewinder, *Crotalus cerastes cerastes*, at Kelso Dunes, Mojave Desert, California, USA. Pp. 279-308 in Campbell, J.A. and Brodie, Jr., E.D. (eds.), Biology of the Pitvipers. Selva, Tyler.

Bryson Jr., R.W. & Holycross, A.T. 2001. *Crotalus willardi amabilis* (Del Nido Ridgenose Rattlesnake). Diet. Herpetological Review, 32(4), 262.

Bryson Jr., R.W., Murphy, R.W., Graham, M.R., Lathrop, A. & Lazcano, D. 2011. Ephemeral Pleistocene woodlands connect the dots for highland rattlesnakes of the *Crotalus intermedius* group. Journal of Biogeography, 38(13), 2299-2310.

Bryson Jr., R.W., Linkem, C.W., Dorcas, M.E., Lathrop, A., Jones, J.M., Alvarado-Díaz, J., Grünwald, C.I. & Murphy, R.W. 2014. Multilocus species delimitation in the *Crotalus triseriatus* species group (Serpentes: Viperidae: Crotalinae) with the description of two new species. Zootaxa 3, 475-496.

Bryson Jr., R.W., Banda, J. & Lazcano, D. 2002. *Crotalus pricei pricei* (Twin-Spotted Rattlesnake). Habitat selection. Herpetological Review, 33(2), 140.

Burchfield, P. 1982. Additions to the Natural History of the Crotaline Snake *Agkistrodon bilineatus* taylori. Journal of Herpetology, 16(4), 376-382. doi:10.2307/1563567.

Calderón-Mandujano, R. R., Galindo-Leal, C., Cedeño-Vázquez, J.R. 2008. Utilización de hábitat por reptiles en estados sucesionales de selvas tropicales de Campeche, México. Acta Zoológica Mexicana, 24(1), 95-114.

Calle, A.B.M & Aguilar-Kirigin, A.J. 2011. *Bothrops sanctaecrucis* Hoge, 1966 (Squamata: Viperidae). Cuadernos de Herpetologia, 25(1), 29-31.

Campbell, J.A. 1976. A new terrestrial pit viper of the genus *Bothrops* (Reptilia, Serpentes, Crotalinae) from western Mexico. Journal of Herpetology, 10(3), 151-160.

Campbell, J.A. & Armstrong, B. (1979). Geographic Variation in the Mexican Pygmy Rattlesnake, *Sistrurus ravus*, with the Description of a New Subspecies. Herpetologica, 35(4), 304-317.

Campbell, J.A. & Flores-Villela, O. 2008. A New Long-Tailed Rattlesnake (Viperidae) From Guerrero, Mexico. Herpetologica 64(2), 246-257.

Campbell, J.A. & Lamar, W.W., 2004. The venomous reptiles of the Western Hemisphere. 2 Vols. Cornell University Press, 2004.

Campbell, J.A. & Smith, E.N. 2000. A new species of arboreal pitviper from the Atlantic versant of northern Central America. Revista de Biología Tropical, 48(4), 1001-1013.

Canseco-Marquez, L. & Mayen, M.G.G. 2006. Herpetofauna del Municipio de Cuetzalan del Progreso, Puebla. In: Ramírez-Bautista, A., L. Canseco-Marquez, F. Mendoza-Quijano (Eds), Inventarios Herpetofaunísticos de Mexico: Avances em el conocimiento de su biodiversidad. Publicaciones de la Sociedad Herpetológica Mexicana, Distrito Federal, México.

Canseco-Márquez, L. & Mendoza-Quijano, F. 2007. *Ophryacus undulatus*. In: IUCN 2012. IUCN Red List of Threatened Species. Version 2012.2. <www.iucnredlist.org>. Downloaded on 23 January 2013.

Carrasco, P.A., Leynaud, G.C. & Scrocchi, G.J. 2010. Redescription of the southernmost snake species, *Bothrops ammodytoides* (Serpentes: Viperidae: Crotalinae). Amphibia-Reptilia, 31, 323-338.

Carrasco, P.A., Mattoni, C.I., Leynaud, G.C. & Scrocchi, G.J. 2012. Morphology, phylogeny and taxonomy of South American bothropoid pitvipers (Serpentes, Viperidae). Zoologica Scripta, 41(2), 109-124.

Carrasco, P.A., Harvey, M.B. & Saravia, A.M. 2009. The rare Andean pitviper *Rhinocerophis jonathani* (Serpentes: Viperidae: Crotalinae): redescription with comments on its systematics and biogeography. Zootaxa, 2283,1-15.

Carreira, S., Meneghel, M. & Achaval, F. 2005. Reptiles de uruguay (No. 598.1 (899) CAR). Sección Zoología Vertebrados, Departamento de Biología Animal, Facultad de Ciencias.

Carvajal-Cogollo, J.E., Castaño-Mora, O.V. & Cárdenas-Arévalo, G. 2007. Reptiles de áreas asociadas a humedales de la planicie del Departamento de Córdoba, Colombia. Caldasia, 29(2), 427-238.

Castoe, T.A., Daza, J.M., Smith, E.N., Sasa, M.M., Kuch, U., Campbell, J.A., Chippindale, P.T. & Parkinson, C.L. 2009. Comparative phylogeography of pitvipers suggests a consensus of ancient Middle American highland biogeography. Journal of Biogeography, 36, 88-103.

Castoe, T.A. & Parkinson, C.L. 2006. Bayesian mixed models and the phylogeny of pitvipers (Viperidae: Serpentes). Molecular Phylogenetic and Evolution, 39, 91-110.

Castoe, T.A., Sasa, M.M. & Parkinson, C.L. 2005. Modeling nucleotide evolution at the mesoscale: The phylogeny of the Neotropical pitvipers of the Porthidium group (Viperidae: Crotalinae). Molecular Phylogenetics and Evolution, 37, 881-898.

Castro, F., Ayerbe, S., Calderón, J.J. & Cepeda, B. 2005. Nuevo registro para Colombia de *Bothrocophias campbelli* y notas sobre B. colombianus y B. myersi (Serpentes: Viperidae). Novedades Colombianas, 8(1), 57-64.

Castro-Herrera, F & Vargas-Salinas, F. 2008. Anfibios y reptiles em el departamento del Valle del Cauca, Colombia. Biota Colombiana, 9(2), 251-277.

Centeno, F.D.C. 2008. Diversidade e uso do ambiente pelos anfíbios e répteis da ilha de São Sebastião, Ilhabela, SP. Ph.D. dissertation, Universidade de São Paulo.

Centeno, F.D.C., Sawaya, R.J. & Marques, O.A.V. 2008. Snake assemblage of Ilha de São Sebastião, southeastern Brazil: comparison to mainland. Biota Neotropica, 8(3). http://dx.doi.org/10.1590/S1676-06032008000300005

Chebez, J.C. 1996. Fauna misionera Catálogo sistemático y zoogeográfico de los vertebrados de la provincia de Misiones (Argentina). LOLA, Buenos Aires.

Chiszar, D., Smith, H.M. & Defusco, R. 1993. *Crotalus viridis viridis* (Prairie Rattlesnake). Diet. Herpetological Review, 24(3), 106.

Cicchi, P.J.P., Sena, M.A.D., Peccinini-Seale, D.M., & Duarte, M.R. 2007. Snakes from coastal islands of state of São Paulo, southeastern Brazil. Biota Neotropica, 7(2). http://dx.doi.org/10.1590/S1676-06032007000200026

Cisneros-Heredia, D.F., Bornnja, M.A., Proaño, D. & Touzet, J. M. 2006. Distribution and natural history of the Ecuadorian Toad-Headed Pitvipers of the genus *Bothrocophias* (Squamata: Serpentes: Viperidae: Crotalinae). Herpetozoa, 19(1/2), 17-26.

Cisneros-Heredia, D.F. & Touzet, J.M., 2004. Distribution and conservation status of *Bothrops asper* (Garman, 1884) in Ecuador. Herpetozoa, 17(3/4), 135-141.

Cisneros-Heredia, D.F. & Yánez-Muñoz, M. 2005. Reptilia, Viperidae, Crotalinae, *Porthidium nasutum*: distribution extension and remarks on its range and records. Check List, 1(1), 16-17.

Cliburn, J.W. 1958. Notes on Some Snakes from Mississippi. American Midland Naturalist, 60(1), 196-201.

Cola, V.D. & Chiaraviglio, M., 2011. Establishing species' environmental requirements to understand how the southernmost species of South American pitvipers (*Bothrops*, Viperidae) are distributed: A niche-based modelling approach. Austral Ecology, 36, 90-98.

Contreras-Lozano, J.A., Lazcano, D., Contreras-Balderas, A.J. & Lavín-Murcio, P.A. 2010. Notes on mexican herpetofauna 14: an update to the herpetofauna of Cerro El Potosí, Galeana, Nuevo León, Mexico. Bulletin of the Chicago Herpetological Society, 45(3), 41-46

Coupe, B. 2001. Arboreal Behavior in Timber Rattlesnakes (*Crotalus horridus*). Herpetological Review. 32(2), 83-85.

Coupe, B. & Dawson, J.E. 2007. Crotalus cerastes (Sidewinder). Attempted feeding and mortality. Herpetological Review, 38(3), 339-340.

Crosswhite, D.L., Fox, S.F. & Thill, R.E., 2004. Herpetological habitat relations in the Ouachita Mountains, Arkansas. Pp. 273-282 in Guldin, J.M. (Ed.), Ouachita and Ozark Mountains Symposium: Ecosystem Management Research, Hot Springs, Arkansas. General Technical Report No. SRS-74. Southern Research Station, USDA Forest Service, Asheville.

Csorba, G., Horváth, A., Korsós, Z., Vidal-López, R. & Muñoz-Alonso, A. 2004. Results of the collecting trips of the Hungarian Natural History Museum in Chiapas, Mexico, in 2000-2001: Mammalia, Reptilia, Amphibia. Annales Historico-Naturales Musei Nationalis Hungarici, 96, 321-334.

Cunha, O., & Nascimento, F. 1978. Ofidios da Amazonia. X. Ofidios de la regiao leste do Para. Publicações Avulsas do Museu Paraense Emílio Goeldi (Zoologia), 31, 1-218.

Cunningham, J.D. 1959. Reproduction and Food of Some California Snakes. Herpetologica, 15, 17-18.

Davis, W.B. & Smith, H.M. 1953. Snakes of the Mexican State of Morelos. Herpetologica, 8(4), 133-143.

Daza, J.M., 2010. Biogeography and Diversification in the Neotropics: testing macroevolutionary hypotheses using molecular phylogenetic data. Ph.D. dissertation University of Central Florida, Orlando.

Deiques, C.H., Stahnke, L.F., Reinke, M. & Schmitt, P. 2007. Guia ilustrado dos anfíbios e répteis do Parque Nacional de Aparados da Serra, Rio Grande do Sul, Santa Catarina, Brasil. Porto Alegre, USEB.

Dias, E.J.R. & Rocha, C.F.D. 2005. Os répteis nas restingas do estado da Bahia: Pesquisa e ações para a sua conservação. Instituto Biomas, Rio de Janeiro.

Diller, L.V. & Johnson, D.R. 1988. Food habits, consumption rates, and predation rates of western rattlesnakes and gopher snakes in southwestern Idaho. Herpetologica, 44(2), 228-233.

Dixo, M. & Verdade, V.K. 2006. Leaf litter herpetofauna of the Reserva Florestal de Morro Grande, Cotia (SP). Biota Neotropica, 6(2). http://dx.doi.org/10.1590/S1676-06032006000200009

Dixon, J.R., Sabbath, M. & Worthington, R. 1962. Comments on snakes from Central and western México. Herpetologica, 18(2), 91-100.

Doan, T.M. & Arriaga, W.A., 2002. Microgeographic Variation in Species Composition of the Herpetofaunal Communities of Tambopata Region, Peru 1. Biotropica, 34(1), 101-117.

Douglas, M.E., Douglas, M.R., Schuett, G.W. & Porras, L.W.. 2006. Evolution of rattlesnakes (Viperidae; *Crotalus*) in the warm deserts of western North America shaped by Neogene vicariance and Quaternary climate change. Molecular Ecology, 15, 3353-3374.

Douglas, M.E, Douglas, M.R, Schuett, G.W, Porras, L.W, & Thomason, B.L. 2007. Genealogical Concordance between Mitochondrial and Nuclear DNAs Supports Species Recognition of the Panamint Rattlesnake (*Crotalus mitchellii stephensi*). Copeia, 2007(4), 920-932.

Duellman, W.E. 1965. Amphibians and reptiles from the Yucatan Peninsula, Mexico. University of Kansas Publications, Museum of Natural History 15, 577-614.

Duellman, W.E. & Mendelson, J.R., 1995. Amphibians and reptiles from northern Departamento Loreto, Peru: taxonomy and biogeography. The University of Kansas science bulletin, 55, 329-376.

Dugan, E.A., & Melanson, M.A. 2005. *Crotalus atrox* Diet. Herpetological Review, 36(3), 322-323.

Dunn, E.R. 1915. List of Amphibians and Reptiles Observed in the Summers of 1912, 1913 and 1914, in Nelson County, Virginia. Copeia(1915), 5-7.

Dunn, E.R. 1940. New and Noteworthy Herpetological Material from Panama. Proceedings of Academy of Natural Sciences of Philadelphia, 92, 105-122.

Dunn, E.R. 1947. Snakes of the Lérida Farm (Chiriqui Volcano, western Panamá). Copeia, 1947(3), 153-157.

Duvall, D., King, M.B. & Gutzwiller, K.J. 1985. Behavioral ecology and ethology of the Prairie Rattlesnake. National Geographic Research, 1(1), 80-111.

Engelbert, J. & Patrick, M. 2007. *Sistrurus catenatus tergeminus*, Distribution. Herpetological Review, 38(1), 106.

Evermann, B.W. & Clarck, H.W. 1914. The snakes of Lake Maxinkuckee Region. Proceedings of the Indiana Academy of Science, 24, 337-348.

Feio, R.N. & Caramaschi, U. 2002. Contribuição ao conhecimento da herpetofauna do nordeste do estado de Minas Gerais, Brasil. Phyllomedusa: Journal of Herpetology, 1(2), 105-111.

Fenwick, A.M., Greene, H.W. & Parkinson, C.L. 2012. The serpent and the egg: unidirectional evolution of reproductive mode in vipers?. Journal of Zoological Systematics and Evolutionary Research, 50(1), 59-66.

Fenwick, A.M., Gutberlet Jr. R.L., Evans, J.A. & Parkinson, C.L. 2009. Morphological and molecular evidence for phylogeny and classification of South American pitvipers, genera *Bothrops*, *Bothriopsis*, and *Bothrocophias* (Serpentes: Viperidae). Zoological Journal of the Linnean Society, 156(3), 617-640.

Fernandes, D.S., Franco, F.L. & Fernandes, R. 2004. Systematic revision of the genus *Lachesis* Daudin, 1803 (Serpentes, Viperidae). Herpetologica, 60(2), 245-260.

Fernandes, W. & Abe, A.S. 1991. An electrophoretic approach to the relationships among the subspecies of the lancehead *Bothrops neuwiedi* (Serpentes, Viperidae). Zoologischer Anzeiger, 226(3-4), 195-201.

Field, R. & Long, P. 2007. Cusuco National Park, Honduras. Ecology of a Meso-American cloud forest. The University of Nottingham.

Richard Field and Peter Long

Fitch, H.S. 1982. Resources of a snake community in prairie-woodland habitat of northeastern Kansas. In: N. J. Scott (Ed.), Herpetological Communities. U.S. Fish & Wildlife Service Wildlife Research Report, 13, 83-97.

Fitch, H.S. 1999. A kansas snake community: composition and changes over 50 years. Kriegr Publishing Company. Malabar, Florida.

Fitch, H.S., Pisani, G.R., Greene, H.W., Echelle, A.F. & Zerwekh, M. 2004. A field study of the Timber Rattlesnake in Leavenworth County, Kansas. Journal of Kansas Herpetology, 11, 18-24.

Flores-Villela, O. & Sánchez, H.O. 2003. A new species of *Abronia* (Squamata: Anguidae) from the Sierra Madre del Sur of Guerrero, Mexico, with comments on *Abronia deppii*. Herpetologica, 59(4), 524-531.

Folleco-Fernandes, A. J. 2010. Taxonomía del complejo *Bothrops asper* (Serpentes: Viperidae) en el sudoeste de Colombia. Revalidación de la especie Bothrops rhombeatus (García 1896) y descripción de una nueva especie. Revista Novedades Colombianas, 10(1), 33-70.

Ford, N.B., Cobb, V.A. & Lamar, W.W. 1990. Reproductive data on snakes from northeastern Texas. The Texas Journal of Science, 42(4), 355-367.

Foz, J. & Hamilton, R. 2007. *Crotalus horridus*, Behavior. Herpetological Review, 38(1), 86.

França, F.G.R., França, R.C., Germano, C.E.S. & Filho, J.M.O. 2012. *Bothropoides neuwiedi* (Wagler, 1824) (Squamata: Serpentes: Viperidae): Distribution extension for the Atlantic Forest, first vouchered record for Paraíba and geographic. CheckList, 8(1), 170-171.

França, F.G.R., Mesquita, D.O. & Colli, G.R. 2006. A checklist of snakes from Amazonian Savannas in Brazil, housed in the Coleção Herpetológica da Universidade de Brasília, with new distribution records. Occasional Papers Sam Noble Oklahoma Museum of Natural History, 17, 1-13.

França, F.G.R. & Venâncio, N.M. 2010. Reptiles and amphibians of a poorly known region in southwest Amazonia. Biotemas, 23(3), 71-84.

Franco, F. L. & Sugliano, G. O. S. 1998. Répteis na Estação Veracruz (Porto Seguro, Bahia). Publicação Técnico-Científica Estação Veracruz, 3, 1-39.

Freire, A. & U. Kuch. 2000. *Bothrops campbelli*, Diet and Reproduction. Herpetological Review, 31(1), 45.

Freitas, M.A., Franças, D.P.F., Graboski, R., Uhlig, V. & Veríssimo, D. 2012. Notes on the conservation status, geographic distribution and ecology of *Bothrops muriciensis* Ferrarezzi & Freire, 2001 (Serpentes, Viperidae). North-Western Journal of Zoology, 8(2), 338-343.

Frota, J.G., Santos, Jr. A.P., Chalkidis, H.M. & Guedes, A.G. 2005. As serpentes da região do baixo Rio Amazonas, oeste do estado do Pará, Brasil (Squamata). Biociências, 13(2), 211-220.

Fugler, C.M. & Walls, A.B. 1978. Snakes of the Upano Valley of Amazonian Ecuador. Journal of Tennessee Academy of Science, 53(3), 81-87.

Funk, R.S. 1965. Food of *Crotalus cerastes laterorepens* in Yuma County, Arizona. Herpetologica, 21(1), 15-17.

Furtado, M.F., Cardoso, S.T., Soares, O.E., Pereira, A.P., Fernandes, D.S., Tam, D.V. & Sant’Ana, O.A.. 2010. Antigenic cross-reactivity and immunogenicity of *Bothrops* venoms from snakes of the Amazon region. Toxicon, 55, 881-887.

Gates, G.O. 1957. A Study of the Herpetofauna In the Vicinity of Wickenburg, Maricopa County, Arizona.Transactions kansas Academy of Science, 60, 403-418.

Genter, D.L. 1984. *Crotalus viridis* (Prairie Rattlesnake). Food. Herpetological Review, 15(2), 49-50.

Gibbons, J.W. & Cocker, J.W. 1978. Herpetofaunal Colonization Patterns of Atlantic Coast Barrier Islands. American Midland Naturalist, 99(1), 219-233.

Giovanni, M.D., Taylor, C.A. & Perry, G. 2005. *Crotalus viridis viridis* Diet. Herpetological Review, 36(3), 323.

Giraudo, A.R. & Scrocchi, G.J. 2002. Argentinian snakes: an annotated checklist. Smithsonian Herpetological Information Service, 1-53.

Giraudo, A.R., Arzamendia, V.S., Lopez, M., Quaini., R.O., Prieto, Y., Leiva, L.A., Regner, S.A. & Urban, J.M. 2008. Serpientes venenosas de Santa Fe, Argentina: conocimientos obre su historia natural aplicados para la prevención de ofidismo. FABICIB, 12, 69-89.

Gloyd, H.K. 1937. A herpetological consideration of fauna areas in southern Arizona. Bulletin of the Chicago Academy of Sciences, 5, 79-136.

Gloyd, H.K. & Conant, R. 1990. Snakes of the *Agkistrodon* Complex: A Monographic Review. Contributions to Herpetology, Number 6, Society for the Study of Amphibians and Reptiles, Ithaca, New York, United States.

Gomes, J.F. 1913. Uma nova cobra venenosa do Brasil. Annaes Paulistas de Medicina e Cirurgia 1(3), 65-67.

González-Maya, J., Castañeda, F., González, R., Pacheco, J. & Ceballos, G. 2014. Distribution, Range Extension, and Conservation of the Endemic Black-headed Bushmaster (*Lachesis melanocephala*) in Costa Rica and Panama. Herpetological Conservation and Biology, 9(2), 369-377

Grazziotin, F.G., Monzel, M., Echeverrigaray, S. & Bonatto, S.L. 2006. Phylogeography of the *Bothrops jararaca* complex (Serpentes: Viperidae): past fragmentation and island colonization in the Brazilian Atlantic Forest. Molecular Ecology, 15(13), 3969-3982.

Greene, H.W. & Campbell, J.A., 1972. Notes on the use of caudal lures by arboreal green pit vipers. Herpetologica, 32-34.

Grismer, L. 2002. Amphibians and Reptiles of Baja California, Including its Pacific Islands and the Islands in the Sea of Cortés. University of California Press, Berkeley.

Guerrer, J.E.V. & Haro, O. 2012. Biogeografía del género *Bothrocophias* (Serpentes: Viperidae: Crotalinae), mediante modelamientos de nicho ecológico. Universidad Central del Ecuador, Quito.

Gutberlet, R.L. Jr. & Campbell, J.A. 2001. Generic recognition for a neglected lineage of South American Pitvipers (Squamata: Viperidae: Crotalinae), with a description of a new species from the colombian Chocó. American Museum Novitates, 3316, 1-15.

Gutsche, A., Kwet, A., Kucharzewski, C., Lingnau, R., & Günther, R. 2007. Wilhelm Ehrhardt and an evaluation of his amphibians and reptiles held in the Herpetological Collection of the Museum für Naturkunde, Berlin. Zoosystematics and Evolution, 83(1), 80-93.

Guyer, C. & Donnelly, M.A. 1990. Length-mass relationships among an assemblage of tropical snakes in Costa Rica. Journal of Tropical Ecology, 6, 65-76.

Hamdan, B., Lira-da-Silva, R.M. & Napoli, M. 2007. Geographic Distribution, *Bothrops jararaca*. Herpetological Review, 38, 485.

Harvey, M.B. 1994. A new species of montane pitviper (Serpentes: Viperidae: *Bothrops*) from Cochabamba, Bolivia. Proceedings of the Biological Society of London, 107(1), 60-66.

Harvey, M.B., Aparicio, E.J. & Gonzales, A.L. 2005. Revision of the venomous snakes of Bolivia. II: The pitvipers (Serpentes: Viperidae). Annals of Carnegie Museum, 74(1), 1-37.

Hartmann, P.A. 2005. História natural e ecologia de duas taxocenoses de serpentes na Mata Atlântica. Ph.D. dissertation, Universidade Estadual Paulista, Rio Claro.

Hartmann, M.T., Garcia, P.C.A., Giasson, L.O.M. & Hartmann, P.A. 2008. Répteis. A fauna das áreas de influência da Usina Hidrelétrica Quebra-Queixo. Pp. 89-107 in Cherem, J.J. & M. Kammers, M. (Eds.), A fauna das áreas de influência da Usina Hidrelétrica Quebra Queixo. Habilis Editora, Erechim.

Heiden, A.M. & Flores-Villela, O. 2013. New records of the rare Sinaloan Long-tailes rattlesnake, *Crotalus stejnegeri*, from southern Sinaloa, Mexico. Revista Mexicana de Biodiversidad, 84, 1343-1348.

Henke, N.K. 2012. Assessment of Land Use and Neotropical Herpetofauna Along Steep Gradients of Elevation in an Ecuadorian Ramsar Wetland Site #1143. MSc thesis, Coastal Carolina University.

Herrera, N., Henríquez, V. & Rivera, A.M. 2005. Contribuciones al conocimiento de la Herpetofauna de El Salvador. Mesoamericana, 9(3), 1-6.

Heyer, W.R. 1967. A herpetofaunal study of an ecological transect through the Cordillera de Tilarán, Costa Rica. Copeia, 1967(2), 259-271.

Hill, M.M.A., Powell, G.L. & Russell, A.P. 2001. Diet of the Prairie Rattlesnake, *Crotalus viridis viridis*, in Southeastern Alberta. The Canadian Field-Naturalist. 115(2), 241-246.

Hofer, U. & Bersier, L.F. 2001. Herpetofaunal diversity and abundance in tropical upland forests of Cameroon and Panama. Biotropica, 33(1), 142-152.

Hoge, A.R. 1952. Notas herpetológicas. 1a. contribuição ao conhecimento dos ofidios do Brasil Central. Memórias do Instituto Butantan, 24(2), 179-214.

Hoge, A.R., Belluomini, H. E. 1962. Notas sôbre *Bothrops fonsecai* Hoge e Belluomini, *Bothrops alternatus* Duméril, Bibron et Duméril e *Bothrops cotiara* Gomes. Memórias do Instituto Butantan, 30, 97-102.

Hollycross, A.T., Painter, C.W., Barker, D.G & Douglas, M.E. 2002. Foraging ecology of the threatened new mexico Ridge-Nosed Rattlesnake (*Crotalus willardi obscurus*). Pp. 243-251 in Schuett, G.W., Höggren, M., Douglas, M.E. & Greene H.W. (Eds.), Biology of the vipers. Eagle Mountain Publishing, Eagle Mountain.

Hoogmoed, M.S. 1997. Rediscovery of a forgotten snake in an unexpected place and remarks on a small herpetological collection from southeastern Brazil. Zoologische Mededeelingen, 71, 63-81.

Huey, L.M. 1942. A Vertebrate Fauna Survey of the Organ Pipe Cactus National Monument, Arizona. Transactions of the San Diego Society of Natural History, 9(32), 353-376.

Hulse, A.C. 1973. Herpetofauna of the Fort Apache Indian Reservation, East Central Arizona. Journal of Herpetology, 7(3), 275-282

Icochea, J., Quispitupac, E., Portilla, A. & Ponce, E., 2001. Assessment of amphibians and reptiles of the Lower Urubamba Region, Peru. Urubamba: The Biodiversity of a Peruvian Rain Forest. Smithsonian Institution, Washington DC, 129-142.

Ihering, R. von 1911. As cobras do Brazil. Primeira parte. Revista do Museu Paulista 8, 273-379.

Infante-Rivero, E. 2009. Primer registro de *Porthidium lansbergii* lansbergii Schlegel, 1841, en la Guajira, Venezoelana, con comentarios sobre ela genero y la distribución en el estado Zulia. Herpetotropicos, 5, 25-28.

Jadin, R.C. 2010. *Cerrophidion tzotzilorum*. Catalogue of American Amphibians and Reptiles, 880, 1-2.

Jadin, R.C., Smith, E.N. & Campbell, J.A. 2011. Unravelling a tangle of Mexican serpents: a systematic revision of highland pitvipers. Zoological Journal of the Linnean Society, 163, 943-958.

Jadin, R.C., Townsend, J.H., Castoe, T.A. & Campbell, J.A. 2012. Cryptic diversity in disjunct populations of Middle American Montane Pitivipers: a systematic reassessment of *Cerrophidion godmani*. Zoologica Scripta, 41(5), 455-470.

Jansen, M. 2006. Primeros registros de *Bothrops pauloensis* Amaral, 1925 (Serpentes: Viperidae) en Bolivia. Kempffiana 2(1), 66-71.

Jorgensen, D. & Gates, C. 2007. *Crotalus viridis viridis*, Behavior. Herpetological Review, 38(1), 87-88.

Jones, B., Fox, S.F., Leslie Jr., D.M., Engle, D.M. & Lochmiller, R.L. 2000. Herpetofaunal responses to brush management with herbicide and fire. Journal of Range management, 53(2), 154-158.

Jorge da Silva, N., Jr. and J.W.Sites, Jr. 1995. Patterns ofdiversity of Neotropical squamate reptilespecies with emphasis on the Brazilian Amazon and the conservation potential of indigenous reserves. Conservation Biology 9, 873-901.

Kacoliris, F., Horlent, N. & Williams, J. 2006. Herpetofauna, Costal Dunes, Buenos Aires Province, Argentina. Check List, 2(3), 15-21.

Keenlyne, K.D. 1972. Sexual Differences in Feeding Habits of *Crotalus horridus horridus*. Journal of Herpetology, 6(3/4), 234-237.

Keenlyne, K.D. & Beer, J.R., 1973. Food habits of *Sistrurus catenatus catenatus*. Journal of Herpetology, 7(4), 382-385.

King, W. 1939. A survey of the Herpetology of Great Smoky Mountains National Park. The American Midland Naturalist, 21(3), 531-582

King, K.A., 1975. Unusual Food Item of the Western Diamondback Rattlesnake (*Crotalus atrox*). The Southwestern Naturalist, 20(3), 416-417.

Klauber, LM., 1972. Rattlesnakes: Their Habits, Life Histories, and Influence on Mankind. 2 Vols, 2nd Ed. University of California Press.

Kraus, F., Mink, D.G. & Brown, W.M. 1996. Crotaline intergeneric relationships based on mitochondrial DNA sequence data. Copeia, 1996(4),763-773.

Kunz, T.S., & Ghizoni-Jr, I.R. 2009. Serpentes encontradas mortas em rodovias do estado de Santa Catarina, Brasil. Biotemas, 22(2), 91-103.

Landreth, H.F., 1973. Orientation and behavior of the rattlesnake, *Crotalus atrox*. Copeia. 1973(1), 26-31.

Larreal, J.T., Rivas, G.A., Portillo-Quintero, C. & Barros, T.R. 2012. Squamata reptiles of a fragment of tropical dry forest in northwestern Venezuela (Lake Maracaibo Region). Check List, 8(6), 1220-1224.

Laurencio, D.E. 2007. Environmental correlates to amphibian and reptile diversity in Costa Rica. M.Sc. thesis, Texas A&M University.

Lazcano, D., Contreras-Lozano, J.A., Gallardo-Valdez, J., Peña, C.G. & Castañeda, G. 2009. Notes on Mexican herpetofauna 11: herpetological diversity in Sierra "Cerro de La Silla" (Saddleback Mountain), Nuevo León, Mexico. Bulletin of the Chicago Herpetological Society, 44(2), 21-27.

Lazcano, D., Farr, W.L., Lavin-Murcio, P.A., Contreras-Lozano, J.A., Kardon, A., Narvaez-Torres, S. & Chávez-Cisneros, J.A.. 2009. Notes on Mexican herpetofauna 13: DORs in the municipality of Aldama, Tamaulipas, Mexico. Bulletin of the Chicago Herpetological Society, 44(12), 181-195.

Lazell, J.D. 1964. The Lesser Antillean representatives of *Bothrops* and *Constrictor*. Bulletin of the Museum of Comparative Zoology Harvard, 132(3), 245-273.

Lawson, D. 1996-97. Sexual dimorphism and reproduction of the pitviper *Porthidium ophryomegas* (Serpentes: Viperidae) in Guatemala. Revista de Biologia Tropical, 44(3)/45(1), 671-674.

Lee, J. & Calderón Mandujano, R. 2007. *Porthidium nasutum*. In: IUCN 2012. IUCN Red List of Threatened Species. Version 2012.2. <www.iucnredlist.org>. Downloaded on 18 February 2013.

Lema, T.D. (1987). Lista preliminar das serpentes registradas para o Estado do Rio Grande do Sul (Brasil Meridional) (Reptilia, Lepidosauria, Squamata). Acta Biologica Leopoldensia, 9(2), 225-240.

Lema, T., & Araujo, M.L. 1980. Sobre *Bothrops jararacussu* Lacerda, 1884 do extremo sul do Brasil e sua ocorrência no Estado do Rio Grande do Sul (Ophidia: Viperidae). Iheringia, série Zoologia, 56, 63-70.

Lemos-Espinal, J.A., Heimes, P. & Smith, H.M. 2007. *Crotalus willardi amabilis* (Del Nido Ridge-nosed Rattlesnake). Diet. Herpetological Review, 38(2), 205.

Lennan, J.S.M. 2009. Taxonomy, zoogeography, and conservation of herpetofauna of Nicaragua. Ph.D. sissertation, Johann Wolfgang Goethe-Universität.

Leray, W.J. 1930. The rattlesnake (*Sistrurus catenatus*) in Ontario. The Canadian Field-Naturalist, 44(9), 201-203.

Leynaud, G.C., Pelegrin, N., Lescano, J.N. 2006. Anfibios y Reptiles. Pp. 219-235 in Bucher E.H. (Ed.), Bañados del río Dulce y Laguna Mar Chiquita (Córdoba, Argentina). Academia Nacional de Ciencias (Córdoba, Argentina).

Leynaud, G.C., Reati, G.J. & Bucher, E.H. 2008. Annual activity patterns os snakes from central Argentina (Códoba province). Studies on Neotropical Fauna and Environment, 43(1), 19-24.

López, C.A. & Nazer, S.J.E., 2009. Anfibios y reptiles de la reserva pricada Yaguaroundí (Misiones, Argentina). Boletin de la Sociedad Zoologica del Urugay, 18, 13-34.

López-Luna, M.A., Vogt, R., & Torre-Loranca, M.A. 1999. A New Species of Montane Pitviper from Veracruz, México. Herpetologica, 55(3), 382-389.

Lotzkat, S. 2007. Taxonoíia e Zoogeografía de la Herpetofauna del Macizo de Nirgua, Venezuela. Johann Wolfgang Goethe-Universität.

Loverlec, O., Pascal, M., Pavis, C. & Feldmann, P. 2007. Amphibians and reptiles of the French West Indies: inventory, threats and conservation. Applied Herpetology, 4, 131-161.

Luja, V.H., Ramírez-Bautista, A. & Sanvicente, M. 2005. *Crotalus simus tzabcan* (Neotropical Rattlesnake). Diet. Herpetological Review, 36(2), 192-193.

Lyman, D. Jr. 2006. *Crotalus cerastes* (Sidewinder). Diet. Herpetological Review, 37(4), 476-477.

Lynch, J.D. & Smith, H.M.1966. New or Unusual Amphibians and Reptiles from Oaxaca, Mexico, II. Transactions of the Kansas Academy os Sciences, 69(1), 58-75.

MacCulloch, R.D., Lathrop, A., Reynolds, R.P., Senaris, J.C. & Schneider, G.E. 2007. Herpetofauna of Mount Roraima, Guiana shield region, northeastern South America. Herpetological Review, 38(1), 24-29.

Magalhães, O. 1925. Contribuição para o estudo dos ophidios brasileiros (1). Memórias do Instituto Oswaldo Crz, Rio de Janeiro 18, 151-155.

Manzani, P.R., Moreno, R.A. & Mattar, M.N. 1997. Bothrops fonsecai (Fonseca's Lancehead). Geographic Distribution. Herpetological Review, 28(4), 210.

Márquez, L.C. & Mayén, M.G.G. 2010. Anfibios y reptiles del Valle de Tehuacán-Cuicatlán. Comisión Nacional para el conocimiento y uso de la biodiversidad (CONABIO), Fundación para la Reserva de la Biosfera Cuicatlán, A. C., y la Benemérita Universidad Autónoma de Puebla.

Marques, O.A.V. & Sazima, I. 2004. História natural dos répteis da Estação Ecológica Juréia-Itatins. Pp. 257-277 in Marques, O.A.V., Duleba W. (Eds.), Estação Ecológica Juréia-Itatins: ambiente físico, flora e fauna. Holos, Ribeirão Preto.

Marques, O.A.V., Martins, M. & Sazima, I. 2002. A new insular pitviper from Brazil, with comments on the evolutionary biology and conservation of the *Bothrops jararaca* group (Serpentes, Viperidae). Herpetologica, 58, 303-312.

Marques, O.A.V., Falcetti, C.A., Pereira, D.N. & Ribeiro, R.A.K. 2004. *Bothrops jararacussu* (Jararacussu). Ophiophagy. Herpetological Review, 35, 58.

Marti, C.D., Steenhof, K., Kochert, M.N. &Marks, J.S. 1993. Community Trophic Structure: the roles of diet, body size, and activity time in vertebrate predators. Oikos, 67(1), 6-18.

Martin, B.E. 1975. An accurrence of the Arizona ridge-nosed rattlesnake, *Crotalus willardi willardi*, observed feeding in nature. Bulletin of the Maryland Herpetological Society, 11, 67.

Martín-Regalado, C.N., Gómez-Ugalde, R. & Cisneros-Palacios, E. 2011. Herpetofauna del Cerro Guiengola, Istmo de Tehuantepec, Oaxaca. Acta Zoológica Mexicana, 27(2), 359-376.

Mauger, D. & Wilson, T.P.. 1999. Population characteristics and seasonal activity of *Sistrurus catenatus catenatus* in Will County, Illinois: implications for management and monitoring. Pp. 110-124 in Johnson, B. & Wright, M. (Eds.), Second International Symposium and Workshop on the Conservation of the Eastern Massasauga Rattlesnake, *Sistrurus catenatus catenatus*: Population and Habitat Management Issues in Urban, Bog, Prairie and Forested Ecosystems,.Toronto Zoo, Toronto.

May, P.G., Farrell, T.M., Heulett, S.T., Pilgrim, M.A., Bishop, L.A., Spence, D.J., Rabatsky, A.M., Campbell, M.G., Aycrigg, A.D. & Richardson Ii, W.E. 1996. Seasonal Abundance and Activity of a Rattlesnake (*Sistrurus miliarius barbouri*) in Central Florida. Copeia, 1996(2), 389-401.

Mayén, M.G.G. & Arenas, J.S. 2007. Herpetofauna de los municipios de Camocuautla, Zapotitlán de Méndez y Huitzilan de Serdán, de la Sierra Norte de Puebla. Pp.197-223 in Herpetodauna de tres municipios de la Sierra Norte de Puebla.

McCranie, J.R. 1993. *Crotalus durissus* Linnaeus Neotropical Rattlesnake. Catalogue of American Amphibians and Reptiles, 577, 1-11.

McCranie, J.R. & Castañeda, F.E. 2005. The herpetofauna of Parque Nacional Pico Bonito, Honduras. Phyllomedusa, 4(1), 3-17.

Medina-Aguilar, O., Alvarado-Díaz, J. & Suazo-Ortuño, I. 2011. Herpetofauna de Tacánbaro, Michoacán, México. Revista Mexicana de Biodiversidade, 82, 1194-1202.

Medina-Rangel, G.F. 2011. Diversidad alfa y beta de la comunidad de reptiles en el complejo cenagoso de Zapatosa, Colombia. Revista de Biología Tropical, 59(2), 935-968.

Mejía, J.B.A. 2008. Caracterización de reptiles y percepción local hacia las serpientes em fincas ganaderas de la subcuenca del Río Copán, Honduras. M.Sc. thesis, Centro Agronómico Tropical de Investigación y Enseñanza.

Melgarejo, A.R. 2003. Serpentes peçonhentas do Brasil. Pp 33-61 in Cardoso, J.L.C., França, E.O.S. & Wen, F.H. (Eds.), Animais peçonhentos no Brasil: biologia, clínica e terapêutica dos acidentes. Sarvier, São Paulo.

Mendoza, J.S., Berrio, V. & Gómez, D.A. 2012. Reptilia, Squamata, Viperidae, *Bothrops venezuelensis* Leybold, 1873: Distribution extension and first country record. Check List, 8(2), 310-312.

Meza-Ramos, P., Almendáriz, A.L., Yánez-Muñoz, M.H. 2009. Datos sobre la dieta de *Bothriechis schlegelii* (Berthold, 1984) (Serpentes-Viperidae) en el Occidente del Ecuador. Boletín Técnico Serie Zoológica, 6, 15-18.

Minton Jr., S.A. & Minton, J.E. 1948. Notes on a Herpetological Collection from the Middle Mississippi Valley. American Midland Naturalist, 40(2), 378-390.

Mole, R.R. & Urich, F.W. 1894. A preliminary list of the reptiles and batrachians of the island of Trinidad. Journal of the Trinidad Field Naturalists'Club, 2, 77-90.

Monteiro, C., Montgomery, C.E., Spina, F., Sawaya, R.J., & Martins, M. 2006. Feeding, reproduction, and morphology of *Bothrops mattogrossensis* (Serpentes, Viperidae, Crotalinae) in the Brazilian Pantanal. Journal of Herpetology, 40(3), 408-413.

Mosimann, J.E. & Rabb, G.B. 1952. The Herpetology of Tiber Reservoir Area, Montana. Copeia, 1952(1), 23-27.

Mulcahy, D.G., Menselson Iii, J.R., Setser, K.W. & Hollenbeck, E. 2003. *Crotalus cerastes* (Sidewinder). Prey/predator weight-ratio. Herpetological Review, 34(1), 64.

Müller, F. 1885. Vierter Nachtrag zum Katalog der herpetologischen Sammlung des Basler Museums. Verhandlungen der Naturforschenden Gesellschaft in Basel 7, 668-717.

Muñoz-Alonso, A. 2007. *Porthidium dunni*. In: IUCN 2012. IUCN Red List of Threatened Species. Version 2012.2. <www.iucnredlist.org>. Downloaded on 25 January 2013.

Neill, W.T. 1966. Notes on *Bothrops hyoprora* (Serpentes: Crotalidae). Herpetologica, 22(3), 235-239.

Neill, W.T. & Allen, R. 1959. Additions to the British Honduras herpetofaunal list. Herpetologica, 15(4), 235-240.

Oliveira, M.E. & Martins, M. 2001. When and where to find a pitviper: activity patterns and habitat use of the lancehead, *Bothrops atrox*, in central Amazonia, Brazil. Herpetological Natural History, 8(2), 101-110.

Ortega-Andrade, M., Bermingham, J., Aulestia, C. & Paucar, C. 2010. Herpetofauna of the Bilse Biological Station, province of Esmeraldas, Ecuador. Check List, 6(1), 119-154.

Palmer, W.M. & Williamson, G.M., 1971. Observations on the Natural of the Carolina Pigmy Rattlesnake, *Sistrurus miliarius miliarius*. Journal of the Elisha Mitchell Scientific Society, 87, 20-25.

Palmuti, C.F.D.S., Cassimiro, J., & Bertoluci, J. 2009. Food habits of snakes from the RPPN Feliciano Miguel Abdala, an Atlantic Forest fragment of southeastern Brazil. Biota Neotropica, 9(1). http://dx.doi.org/10.1590/S1676-06032009000100028

Parker, H.W. 1935. The frogs, lizards and snakes of British Guiana. Proceedings of the Zoological Society of London, 1935, 505-530.

Parker, S.A. & Stotz, D. 1977. An observation on the foraging behavior of the Arizona ridge-nosed rattlesnake, *Crotalus willardi willardi*. Bulletin of the Maryland Herpetological Society, 13(2), 123.

Parkinson, C.L. 1999. Molecular systematics and biogeographical history of pitvipers as determined by mitochondrial ribosomal DNA sequences. Copeia, 1999(3), 576-586.

Parmley, D. & Parmley, A.M., 2001. Food habits of the Canebrake Rattlesnake (*Crotalus horridus atricaudatus*) in central Georgia. Georgia Journal of Science, 59, 172-178.

Patten, R.B. & Banta, B.H.1980. A rattlesnake, *Crotalus ruber*, feeds on a road-killed animal. Journal of Herpetology, 14(1), 111-112.

Perry, R.W., Rudolph, D.C. & Thill, R.E. 2009. Reptile and Amphibian Responses to Restoration of Fire-Maintained Pine Woodlands. Restoration Ecology, 17(6), 917-927.

Peterson, A.T., Márquez, L.C., Jiménez, J.L.C., Escalona-Segura, G., Flores-Villela, O., García-López, J., Hernández-Baños, B., Ruiz, C.A.J., León-Paniagua, L., Amaro, S.M., Navarro-Singüenza, A.G., Sánchez-Cordero, V. & Willard, D.E. 2004. A preliminary biological survez of Cerro Piedra larga, Oxaca, Mexico: Birds, mammals, reptiles, amphibians, and plants. Anales del Instituto de Biología, Universidad Nacional Autónoma de México, Seria Zoología, 75(2), 439-466.

Pisani, G.R. & Stephenson, B.R., 1991. Food Habits in Oklahoma *Crotalus atrox* in Fall and Early Spring. Transactions of the Kansas Academy of Science, 94(3/4), 137-141.

Pontes, J.A.L., Figueiredo, J.P., Pontes, R.C. & Rocha, C.F.D. 2008. Snakes from the Atlantic Rainforest area of Serra do Mendanha, in Rio de Janeiro state, southeastern Brazil: a first approximation to the taxocenosis composition. Brazilian Journal of Biology, 68(3), 601-608.

Porras L.W., Wilson L.D., Schuett G.W. & Reiserer R.S. 2013. A taxonomic reevaluation and conservation assessment of the common cantil, *Agkistrodon bilineatus* (Squamata: Viperidae): a race against time. Amphibian & Reptile Conservation 7(1), 48-73.

Pough, H. 1966. Ecological Relationships of Rattlesnakes in Southeastern Arizona with Notes on Other Species. Copeia, 1966(4), 676-687.

Prigioni, C., Borteiro, C. & Kolenc, F. 2011. Amphibian and reptilia, Quebrada de los Cuervos, Departamento de Treinta y Tres, Uruguay. Check List, 7(6), 763-767.

Quintela, F.M., Loebmann, D. & Gianuca, N.M. 2006. Répteis continentais do município de Rio Grande, Rio Grande do Sul, Brasil. Biociências, 14(2), 180-188.

Rabatsky, A.M. & Farrell, T. 1996. The effects of age and light level on foraging posture and frequency of caudal luring in the rattlesnake, Sistrutus miliarius barbouri. Jounal of Herpetology, 30(4), 558-561.

Rado, T.A. & Rowlands, P.G. 1981. A range extension and low elevation record for the Arizona Ridgenose Rattlesnake (*Crotalus w. willardi*). Herpetologia Review, 12(11), 15.

Ramírez-Bautista, A., Hernández-Salinas, U., Mendiza-Quijano, F., Cruz-Elizalde, R., Stephenson, B.P., Vite-Silva, V.D. & Leyte-Manrique, A. 2010. Lista anotada de los anfibios y reptiles del estado de Hidalgo, Mexico. Universidade Autónoma del Estado de Hidalgo, Comisión Nacional para el conocimiento y uso de la biodiversidad.

Reyna-Alvarez, J., Suzo-Ortuño, I. & Alvarado-Díaz, J. 2010. Herpetofauna del Municipio de Huetamo, Michoacán, México. Biológicas, 12(1), 40-45.

Reinert, H.K. 1984. Habitat separation between sympatric snake populations. Ecology, 65(2), 478-486.

Reinert, H.K., Bushar, L.M., Rocco, G.L., Goode, M. & Odum, R.A. 2002. Distribution of the Aruba Island rattlesnake, *Crotalus unicolor*, on Aruba, Dutch West Indies. Caribbean Journal of Science, 38, 26-128.

Reinert, H.K., Cundall, D. & Bushar, L.M. 1984. Foraging behavior of the Timber Rattlesnake, Crotalus horridus. Copeia, 1984(4), 976-981.

Reynolds, R.P. & Icochea, J. 1997. Amphibians and reptiles of the upper Río Comainas, Cordillera del Condor. Pp. 82-86 in Conservation International, RAP working papers seven.

Reyes-Velasco, J., Grünwald, C.I., Jones, J.M. & Weatherman, G.N. 2010. Rediscovery Of The Rare Autlán Long-Tailed Rattlesnakes, *Crotalus lannomi*. Herpetological Review, 41(1), 19-25.

Rivas, G.A., Molina, C.R., Ugueto, G.N., Barros, T.R., Barrio-Amorós, C.L. & Kok, P.J.R. 2012. Reptiles of Venezuela: na updated and commenter checklist. Zootaxa, 3211, 1-64.

Rocha, C.F.D., Bergallo, H.G., Conde, V., Fabiane, C., Bittencourt, E.B., & Santos, H.D.C. 2008. Richness, abundance, and mass in snake assemblages from two Atlantic Rainforest sites (Ilha do Cardoso, São Paulo) with differences in environmental productivity. Biota Neotropica, 8(3). http://dx.doi.org/10.1590/S1676-06032008000300011

Rocha, C.D. & Sluys, M.V. 2006. New records of reptiles from Ilha Grande Island in Rio de Janeiro state, Brazil. Herpetological review, 37(1), 112-113.

Roldan, J.S.M. & Macero, M.F. 2009. A prey item not previously recorded for *Bothrops asper*: A case of ophiophagy involving two sympatric pit viper species. Herpetotropicos, 5(2),107-109.

Rossi, J.V. & Feldner, J.J. 1993. *Crotalus willardi willardi* (Arizona Ridgenose Rattlesnake) and *Crotalus lepidus klauberi* (Banded Rock Rattlesnake). Arboreal behavior. Herpetological Review, 24(1), 35.

Rueda-Solano, R.A. & Castellanos-Barliza, J. 2010. Herpetofauna de Neguange, Parque Nacional Natural Tayrona, Caribe Colombiano. Acta Biologica Colombiana, 15(1), 195-206.

Russell, F.E., Walter, F.G., Bey, T.A. & Fernandez, M.C. 1997. Review article: snakes and snakebite in Central America. Toxicon, 35(10), 1469-1522.

Salomão, M.G., Wüster, W., Thorpe, R.S., Touzet, J. & BBBSP, 1997. DNA evolution of the South American pitvipers of the genus *Bothrops* (Reptilia: Serpentes: Viperidae). Symposia of the Zoological Society of London, 70, 89-98.

Sanz, L., Escolano, J., Ferretti, M., Biscoglio, M.J., Rivera, E., Crescenti, E.J., Angulo, Y., Lomonte, B., Gutiérrez, J.M. & Calvete, J.J. 2008. Snake venomics of the South and Central American Bushmasters. Comparison of the toxin composition of *Lachesis* *muta* gathered from proteomic versus transcriptomic analysis. Journal of Proteomics, 71, 46-60.

Santos-Barrera, G., Pacheco, J., Mendoza-Quijano, F., Bolãnos, F., Chávez, G., Dayli, G.C., Ehrlich, P.R. & Ceballos, G. 2008. Diversity, natural history and conservation of amphibians and reptiles from the San Vito Region, southwestern Costa Rica. Revista de Biología Tropical, 56(2), 755:778.

São Pedro, V.D.A. & Pires, M.R.S. 2009. As serpentes da Região de Ouro Branco, extremo sul da cadeia do Espinhaço, Minas Gerais. Revista Ceres, 56(2), 166-171.

Sasa, M., Wasko, D.K. & Lamar, W.W. 2009. Natural history of the terciopelo *Bothrops asper* (Serpentes: Viperidae) in Costa Rica. Toxicon, 54, 904-922.

Savage, J.M. 1966. The origins and history of Central American herpetofauna. Copeia, 1966(4), 719-766.

Savage, T. 1967. The Diet of Rattlesnakes and Copperheads in the Great Smoky Mountains National Park. Copeia, 1967(1), 226-242

Sawaya, R.J., Marques, O.A.V. & Martins, M. 2008. Composition and natural history of a Cerrado snake assemblage at Itirapina, São Paulo state, southeastern Brazil. Biota Neotropica, 8(2). http://dx.doi.org/10.1590/S1676-06032008000200015

Sazima, I. & Haddad, C.F.B. 1992. Répteis da Serra do Japi: notas sobre história natural. Pp. 28-49 in Morellato, L.P.C. (Ed.), História natural da Serra do Japi: ecologia e preservação de uma área florestal no sudeste do Brasil. Editora da Unicamp/FAPESP, São Paulo.

Schmidt, K.P. & Owens, D.W. 1944. Amphibians and reptiles of northern Coahuila, Mexico. Zoological Series of the Field Museum of Natural History, 269(6), 97-115.

Schmidt, K.P. & Walker, W.F. 1943. Snakes of the Peruvian coastal region. Zoological Series of the Field Museum of Natural History, 24(27), 297-327.

Secor, S.M. 1995. Ecological Aspects of Foraging Mode for the Snakes *Crotalus cerastes* and *Masticophis flagellum*. Herpetological Monographs, 9, 169-186.

Seigel, R.A. 1986. Ecology and Conservation of an Endangered Rattlesnake, *Sistrurus catenatus*, in Missouri, USA. Biological Conservation, 35, 333-346.

Seigel, R.A. & Pilgrim, M.A. 2002. Long-term changes in movement pattern of Massasaugas (*Sistrurus catenatus*). Pp. 405-412 in Schuett, G.W., Höggren, M., Douglas, M.E. & Greene H.W. (Eds.), Biology of the vipers. Eagle Mountain Publishing, Eagle Mountain.

Sexton, O. 1958. The distribution of *Bothrops* *atrox* In relation to food supply. Boletin del Museo de Ciencias Naturales, 2/3(1-4), 47-54.

Silva, V.X. 2000. Revisão sistemática do complexo *Bothrops neuwiedi* (Serpentes, Viperidae, Crotalinae). Ph.D. dissertation, Universidade de São Paulo.

Silva, V.X. & Rodrigues, M.T. 2008. Taxonomic revision of the *Bothrops neuwiedi* complex (Serpentes, Viperidae) with description of a new species. Phyllomedusa, 7(1), 45-90.

Silva, J.L., Valdez, J. & Ojasti, J. 1985. Algunos aspectos de una comunidad de Ophidios del norte de Venezuela. Biotropica, 17(2),112-125.

Silva, NJ. & Sites, J.W.1995. Patterns of diversity of Neotropical squamate reptile species with emphasis on the Brazilian Amazon and the conservation potential of indigenous reserves. Conservation Biology, 9(4), 873-901.

Smyth, T. 1949. Notes on the Timber Rattlesnake at Moutain Lake, Virginia. Copeia. 1949(1), 79.

Smith, E.N. & Ferrari-Castro, J.A. 2008. A New species of jumping pitviper of the genus *Atropoides* (Serpentes: Viperidae: Crotalinae) from the Sierra de Botaderos and the Sierra La Muralla, Honduras. Zootaxa 1948, 57-68.

Smith, P.W. & Darling, D.M. 1952. Results of a Herpetological Collection from Eastern Central Mexico. Herpetologia, 8(3), 81-86.

Solórzano, A. 1994. Una nueva especie de serpiente venenosa terrestre del género *Porthidum* (Serpentes: Viperidae), del Suroeste de Costa Rica. Revista de Biología Tropical, 42(3), 695-701.

Solórzano, A. 1997. Reproducción de la toboba de árbol, *Bothriechis nigroviridis* (Serpentes: Viperidae), em Costa Rica. Revista de Biologia Tropical, 45, 4, 1675-1677.

Solórzano, A., Gómez, L.D., Monge-Nájera, J. & Crother, B.I. 1998. Redescription and validation of *Bothriechis supraciliaris* (Serpentes: Viperidae). Revista de Biología Tropical, 46(2), 453-462.

Staber, R. M. 1948. Prairie Rattlesnake eats Spadefoot Toad. Herpetologica, 4, 168.

Strussmann, C. & Sazima, I. 1993. The snake assemblage of the Pantanal at Poconé, western Brazil: faunal composition and ecological summary. Studies on Neotropical Fauna and Environment, 28(3), 157-168.

Stuart, L.C. 1935. A contribution to a knowledge of the herpetology of a portion of the savanna region of Central Petén, Guatemala. University of Michigan, Museum of Zoology Miscellaneous Publications, 29, 1-56

Stuart, L.C. 1963. A checklist of the herpetofauna of Guatemala. University of Michigan Museum of Zoology Miscellaneous Publications, 122, 1-150.

Swanson, P.L. 1939. Herpetological notes from Indiana. American Midland Naturalist, 22(3), 684-695.

Swanson, P.L. 1945. Herpetological notes from Panama. Copeia, 1945(4), 210-216.

Taggart, T.W., Crother, B.I. & White, M.E. 2001. Palm-Pitvipers (*Bothriechis*) phylogeny, mtDNA, and consilience. Cladistics, 17, 355-370.

Taylor, E.H. 1950. Second contribution to the herpetology of San Luis Potosí. The University of Kansas Science Bulletin, 33, 441-457.

Taylor, E.H. 1951. A brief review of the snakes of Costa Rica. The University of Kansas Science Bulletin, 34(1), 3-188.

Taylor, W.E. 1892. Catalogue of the Snakes of Nebraska with Notes on their habits and Distribution. The American Naturalist, 26(309), 742-752.

Tevis, L., Jr.1943. Field Notes on a Red Rattlesnake in Lower California. Copeia, 1943(4), 242-245.

Thayer, F.D. 1988. *Crotalus atrox*, (Western Diamondback Rattlesnake). Hunting behavior. Herpetological Review, 19(2), 35

Townsend, J.H., Medina-Flores, M., Wilson, L.D., Jadin, R.C. & Austin, J.D. 2013 A relict lineage and new species of green palm-pitviper (Squamata, Viperidae, *Bothriechis*) from the Chortís Highlands of Mesoamerica. ZooKeys, 298, 77-106.

Townsend, J.H., Wilson, L.D., Talley, B.L., Fraser, D.C., Plenderleith, T.L. & Hudghes, A.M. 2006. Additions to the herpetofauna of Parque Nacional El Cusco, Honduras. Herpetological Bulletin, 96, 29-39.

Trauth, S.E., Cox, Jr. R.L., Meshaka, W.E., Butterfield, B.P. & Holt, A. 1994. Female Reproductive Traits in Selected Arkansas Snakes. Proceedings Arkansas Academy of Science, 48, 196-209.

Turci, L.C.B., Albuquerque, S.D., Bernarde, P.S. & Bazzo M.D. 2009. Uso do hábitat, atividade e comportamento de *Bothriopsis bilineatus* e de *Bothrops atrox* (Serpentes: Viperidae) na floresta do Rio Moa, Acre, Brasil. Biota Neotropica, 9(3). http://dx.doi.org/10.1590/S1676-06032009000300020

Turci, L.C.B. & Bernarde, P.S. 2008. Herpetofaunistic survey in a location in the municipality of Cacoal, Rondônia, Brazil. Bioikos, 2, 101-108.

Valencia-Hernández, A.A., Goyenechea, I. & Castillo-Cerón, J.M. 2007. Notes on scutellation, length, and distribution of rattlesnakes (Serpentes: Viperidae: *Crotalus*) in the state of Hidalgo, Mexico. Acta Zoológica Mexicana, 23(3), 29-33.

Valdujo, P.H., Nogueira, C.C., Baumgarten, L., Rodrigues, F.H.G., Brandão, R.A., Eterovic, A., Ramos-Neto, M.B. & Marques, O.A. 2009. Squamate reptiles from Parque Nacional das Emas and surroundings, Cerrado of central Brazil. Check List, 5(3), 405-417.

Valdujo, P.H., Nogueira, C.C., & Martins, M. 2002. Ecology of *Bothrops neuwiedi pauloensis* (Serpentes: Viperidae: Crotalinae) in the Brazilian cerrado. Journal of Herpetology, 169-176.

Van-Silva, W., Guedes, A.G., de Azevedo-Silva, P.L., Gontijo, F.F., Barbosa, R.S., Aloísio, G.R. & de Oliveira, F.C.G. 2007. Herpetofauna, Espora hydroelectric power plant, state of Goiás, Brazil. Check List, 3(4), 338-345.

Vanzolini, P.E. 1948. Notas sobre os ofídios e lagartos da Cachoeira de Emas, no município de Pirassununga, Estado de São Paulo. Revista Brasileira de Biologia, 8(3), 377-400.

Vanzolini, P.E. 1991. A biometrical note on *Bothrops moojeni* Hoge 1966 (Serpentes: Viperidae). Anais da Academia Brasileira de Ciências, 63, 388-341.

Vanzolini, P.E. & Brandao, J.H.F. 1946. Notas sobre algumas diferenças sexuais na folidóse de Bothrops alternatus D. et B., 1854, e sua variação geográfica. Memórias do Instituto Butantan 18, 251-258.

Vargas-Salinas, F., Delgado-Ospina, I. & López-Aranda, F. 2011. Mortalidad por atropello vehicular y distribución de anfibios y reptiles en un bosque subandino en el occidente de Colombia. Caldasia, 33(1), 121-138.

Vigle, G.O. 2008. The amphibians and reptiles of the Estación Biológica Jatun Sacha in the lowland rainforest of Amazonian Ecuador: a 20-year record. Breviora, 514, 1-30.

Whiles, M.R., Lips, K.R., Pringle, C.M., Kilham, S.S., Bixby, R.J., Brenes, R., Connelly, S., Colon-Gaud, J.C., Hunte-Brown, M., Huryn, A.D., Montgomery, C. & Peterson, S. 2006. The effects of amphibian population declines on the structure and function of Neotropical stream ecosystems. Frontiers in Ecology and the Environment, 4(1), 27-34.

Wilson, L.D. & McCranie, J.R. 1984. *Bothrops nasuta*. Catalogue of American Amphibians and Reptiles, 349, 1-2

Wilson, L.D. & McCranie, J.R. 1992. *Bothriechis marchi* (Barbour and Loveridge) March's Palm Pit Viper. Catalogue of American Amphibians and Reptiles, 544, 1-2.

Wilson, L.D. & McCranie, J.R. 2003. The conservation status of the herpetofauna of Honduras. Amphibian and Reptile Conservation, 3(1), 6-33.

Woodin, W.H. 1953. Notes on Some Reptiles from the Huachuca Area of Southeastern Arizona. Bulletin of the Chicago Academy of Sciences, 9(15), 285-296.

Wüster, W., Ferguson, J.E., Quijada-Mascareñas, J.A., Pook, C.E., Salomão, M.G. & Thorpe, R.S. 2005. Tracing an invasion: landbridges, refugia, and the phylogeography of the Neotropical rattlesnake (Serpentes: Viperidae: *Crotalus durissus*). Molecular Ecology, 14(4), 1095-1108.

Wüster, W., Peppin, L., Pook, C.E. & Walker, D.E. 2008. A nesting of vipers: phylogeny and historical biogeography of the Viperidae (Squamata: Serpentes). Moleclar Phylogenetics and Evolution, 49, 445-459.

Wüster, W., Salomão, M.G., Quijada-Mascareñas, J.A., Thorpe, R.S. & BBBSP. 2002. Origins and evolution of the South American Pitviper fauna: evidence from mitochondrial DNA sequence analysis. Pp. 111-128 in Schuett, G.W., Höggren, M., Douglas, M.E. & Greene H.W. (Eds.), Biology of the vipers. Eagle Mountain Publishing, Eagle Mountain.

Wüster, W., Thorpe, R.S., Puorto, G. & BBBSP. 1996. Systematics of the *Bothrops Atrox* Comples (Reptilia: Serpentes: Viperidae) in Brazil: a multivariate analysis. Herpetologica, 52(2), 263-271.

Yanosky, A.A., Dixon, J.R. & Mercolli, C. 1996. Ecology of the snake community at El Bagual Ecological Reserve, northeastern Argentina. Herpetological Natural History, V. 4, N. 2: 97-110.

Yañez-Arenas, C., Peterson, A.T., Mokondoko, P., Rojas-Soto, O. & Martínez-Meyer, E. The use of ecological niche modeling to infer potential risk areas of snakebite in the Mexican State of Veracruz. PLOS ONE, 9(6):e100957.

Zamudio, K.R. & Greene, H.W. 1997. Phylogeography of the bushmaster (*Lachesis muta*: Viperidae): implications for neotropical biogeoograhy, systematics, and conservation. Biological Journal of the Linnean Society, 62:421-442.

Zanella, N., Cechin, S.Z., 2006. Taxocenose de ser axocenose de ser axocenose de serpentes no Planalto Médio do Rio Gr pentes no Planalto Médio do Rio Gr pentes no Planalto Médio do Rio Grande do Sul, ande do Sul, ande do Sul, Brasil. Revista Brasileira de Zoologia, 23(1), 211-217.

**Table S2.** Habitats of New World vipers. Major habitats cited in the literature, number of major habitats, and the category considered in our analyses for habitat breadth.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Species** | **Major habitat** | **Number of major habitats** | **Habitat breadth** | **Source** |
| *Agkistrodon bilineatus* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Agkistrodon contortrix* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Agkistrodon howardgloydi* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Agkistrodon piscivorus* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Agkistrodon russeolus* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Agkistrodon taylori* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Atropoides indomitus* | forest | 1 | narrow | Smith & Ferrari-Castro (2008) |
| *Atropoides mexicanus* | forest, grassland/shrubland/savanna | 2 | broad | Campbell and Lamar (2004) |
| *Atropoides nummifer* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Atropoides occiduus* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Atropoides olmec* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Atropoides picadoi* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Bothriechis aurifer* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Bothriechis bicolor* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Bothriechis guifarroi* | forest | 1 | narrow | Townsend et al. (2013) |
| *Bothriechis lateralis* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Bothriechis marchi* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Bothriechis nigroviridis* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Bothriechis rowleyi* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Bothriechis schlegelii* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Bothriechis supraciliaris* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Bothriechis thalassinus* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Bothrocophias andianus* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Bothrocophias campbelli* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Bothrocophias colombianus* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Bothrocophias hyoprora* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Bothrocophias microphthalmus* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Bothrocophias myersi* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Bothrops alcatraz* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Bothrops alternatus* | grassland/shrubland/savanna | 1 | narrow | Lema (1987), Norman (1994), Martins et al. (2002), Guerreiro et al. (2005), Kacoliris et al. (2006), Sawaya et al. (2008), Nori et al. (2011) |
| *Bothrops ammodytoides* | grassland/shrubland/savanna | 1 | narrow | Campbell and Lamar (2004) |
| *Bothrops asper* | forest, grassland/shrubland/savanna | 2 | broad | Campbell and Lamar (2004) |
| *Bothrops atrox* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Bothrops ayerbei* | forest | 1 | narrow | Folleco-Fernandez (2010) |
| *Bothrops barnetti* | desert | 1 | narrow | Campbell and Lamar (2004) |
| *Bothrops bilineataus* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Bothrops brazili* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Bothrops caribbaeus* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Bothrops chloromelas* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Bothrops cotiara* | forest, grassland/shrubland/savanna | 2 | broad | Campbell and Lamar (2004) |
| *Bothrops diporus* | forest, grassland/shrubland/savanna | 2 | broad | Campbell and Lamar (2004) |
| *Bothrops erythromelas* | grassland/shrubland/savanna | 1 | narrow | Campbell and Lamar (2004) |
| *Bothrops fonsecai* | forest, grassland/shrubland/savanna | 2 | broad | Campbell and Lamar (2004) |
| *Bothrops insularis* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Bothrops itapetiningae* | grassland/shrubland/savanna | 1 | narrow | Campbell and Lamar (2004) |
| *Bothrops jararaca* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Bothrops jararacussu* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Bothrops jonathani* | grassland/shrubland/savanna | 1 | narrow | Campbell and Lamar (2004) |
| *Bothrops lanceolatus* | forest | 1 | narrow | Lazell (1964), Breuil (2009) |
| *Bothrops leucurus* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Bothrops lojanus* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Bothrops lutzi* | grassland/shrubland/savanna | 1 | narrow | Campbell and Lamar (2004) |
| *Bothrops marajoensis* | forest, grassland/shrubland/savanna | 2 | broad | Campbell and Lamar (2004), Rodrigues et al. (2016) |
| *Bothrops marmoratus* | grassland/shrubland/savanna | 1 | narrow | Silva & Rodrigues (2008) |
| *Bothrops matogrossensis* | grassland/shrubland/savanna | 1 | narrow | Campbell and Lamar (2004) |
| *Bothrops medusa* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Bothrops moojeni* | forest, grassland/shrubland/savanna | 2 | broad | Nogueira et al. (2003), Campbell and Lamar (2004) |
| *Bothrops muriciensis* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Bothrops neuwiedi* | forest, grassland/shrubland/savanna | 2 | broad | Campbell and Lamar (2004), Barros (2011) |
| *Bothrops oligolepis* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Bothrops osbornei* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Bothrops otavioi* | forest | 1 | narrow | Barbo et al. (2012) |
| *Bothrops pauloensis* | grassland/shrubland/savanna | 1 | narrow | Campbell and Lamar (2004) |
| *Bothrops pictus* | desert | 1 | narrow | Campbell and Lamar (2004) |
| *Bothrops pirajai* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Bothrops pubescens* | forest, grassland/shrubland/savanna | 2 | broad | Hartmann et al. (2005) |
| *Bothrops pulcher* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Bothrops punctatus* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Bothrops rhombeatus* | forest | 1 | narrow | Folleco-Fernandez (2010) |
| *Bothrops sanctaecrucis* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Bothrops taeniatus* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Bothrops venezuelensis* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Cerrophidion godmani* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Cerrophidion petlalcalensis* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Cerrophidion sasai* | forest | 1 | narrow | Jadin et al. (2012) |
| *Cerrophidion tzotzilorum* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Cerrphidion wilsoni* | forest | 1 | narrow | Jadin et al. (2012) |
| *Crotalus adamanteus* | grassland/shrubland/savanna | 2 | narrow | Campbell and Lamar (2004) |
| *Crotalus angelensis* | desert | 1 | narrow | Grismer (2002) |
| *Crotalus aquilus* | forest, grassland/shrubland/savanna | 2 | broad | Campbell and Lamar (2004) |
| *Crotalus armstrongi* | forest | 1 | narrow | Campbell (1979) |
| *Crotalus atrox* | forest, grassland/shrubland/savanna | 2 | broad | Campbell and Lamar (2004) |
| *Crotalus basiliscus* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Crotalus caliginis* | desert | 1 | narrow | Campbell and Lamar (2004) |
| *Crotalus campbelli* | forest | 1 | narrow | Bryson et al. (2014) |
| *Crotalus catalinensis* | desert | 1 | narrow | Campbell and Lamar (2004) |
| *Crotalus cerastes* | desert | 1 | narrow | Campbell and Lamar (2004) |
| *Crotalus cerberus* | forest, grassland/shrubland/savanna | 2 | broad | Campbell and Lamar (2004) |
| *Crotalus culminatus* | forest | 2 | narrow | Alvarado-Díaz et al. (2013), Mata-Silva et al. (2015) |
| *Crotalus durissus* | grassland/shrubland/savanna | 2 | narrow | Campbell and Lamar (2004) |
| *Crotalus enyo* | desert, grassland/shrubland/savanna, forest | 3 | broad | Campbell and Lamar (2004) |
| *Crotalus ericsmithi* | forest | 1 | narrow | Campbell & Flores-Villela (2008) |
| *Crotalus estebanensis* | desert | 1 | narrow | Grismer (2002) |
| *Crotalus horridus* | forest | 2 | narrow | Campbell and Lamar (2004) |
| *Crotalus intermedius* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Crotalus lannomi* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Crotalus lepidus* | desert, grassland/shrubland/savanna, forest | 3 | broad | Campbell and Lamar (2004) |
| *Crotalus lorenzoensis* | desert | 1 | narrow | Grismer (2002) |
| *Crotalus mitchelii* | desert, grassland/shrubland/savanna, forest | 3 | broad | Campbell and Lamar (2004) |
| *Crotalus molossus* | desert, grassland/shrubland/savanna, forest | 3 | broad | Campbell and Lamar (2004) |
| *Crotalus muertensis* | desert | 1 | narrow | Grismer (2002) |
| *Crotalus oreganus* | desert, grassland/shrubland/savanna, forest | 3 | broad | Campbell and Lamar (2004) |
| *Crotalus ornatus* | desert | 1 | narrow | Anderson and Greenbaum, 2012 |
| *Crotalus polystictus* | forest, grassland/shrubland/savanna | 2 | broad | Campbell and Lamar (2004) |
| *Crotalus pricei* | forest | 2 | narrow | Campbell and Lamar (2004) |
| *Crotalus pussillus* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Crotalus pyrrhus* | forest, grassland/shrubland/savanna | 2 | broad | Douglas et al. (2007) |
| *Crotalus ravus* | forest, grassland/shrubland/savanna | 2 | broad | Campbell and Lamar (2004) |
| *Crotalus ruber* | desert, grassland/shrubland/savanna, forest | 3 | broad | Campbell and Lamar (2004) |
| *Crotalus scutulatus* | desert, grassland/shrubland/savanna, forest | 3 | broad | Campbell and Lamar (2004) |
| *Crotalus simus* | forest, grassland/shrubland/savanna | 2 | narrow | Campbell and Lamar (2004) |
| *Crotalus stejnegeri* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Crotalus stephensi* | desert | 1 | narrow | Douglas et al. (2007) |
| *Crotalus tancitarensis* | forest | 1 | narrow | Alvarado-Díaz & Campbell (2004) |
| *Crotalus tigris* | desert, grassland/shrubland/savanna | 2 | broad | Campbell and Lamar (2004) |
| *Crotalus tlaloci* | forest | 1 | narrow | Bryson et al. (2014) |
| *Crotalus tortugensis* | desert | 1 | narrow | Grismer (2002) |
| *Crotalus totonacus* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Crotalus transversus* | forest, grassland/shrubland/savanna | 2 | narrow | Campbell and Lamar (2004) |
| *Crotalus triseriatus* | forest, grassland/shrubland/savanna | 2 | narrow | Campbell and Lamar (2004) |
| *Crotalus tzabcan* | forest | 1 | narrow | Carbajal-Márquez et al. (in press) |
| *Crotalus unicolor* | desert | 2 | narrow | Reinert et al. (2002) |
| *Crotalus viridis* | desert, grassland/shrubland/savanna, forest | 3 | broad | Campbell and Lamar (2004) |
| *Crotalus willardi* | forest, grassland/shrubland/savanna | 2 | broad | Campbell and Lamar (2004) |
| *Lachesis acrochorda* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Lachesis melanocephala* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Lachesis muta* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Lachesis stenophrys* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Mixcoatlus barbouri* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Mixcoatlus browni* | forest | 1 | narrow | Jadin et al. (2011) |
| *Mixcoatlus melanurus* | forest, grassland/shrubland/savanna | 2 | broad | Campbell and Lamar (2004) |
| *Ophryacus undulatus* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Porthidium arcosae* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Porthidium dunni* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Porthidium hespere* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Porthidium lansbergii* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Porthidium nasutum* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Porthidium ophryomegas* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Porthidium porrasi* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Porthidium volcanicum* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Porthidium yucatanicum* | forest | 1 | narrow | Campbell and Lamar (2004) |
| *Sistrurus catenatus* | grassland/shrubland/savanna | 1 | narrow | Campbell and Lamar (2004) |
| *Sistrurus miliarius* | forest, grassland/shrubland/savanna | 2 | broad | Campbell and Lamar (2004) |

References cited in Table S2

Alvarado-Díaz, J., Campbell, J.A., 2004. A new montane rattlesnake (Viperidae) from Michoacán, Mexico. Herpetologica, 60(2): 281-286.

Alvarado-Díaz, J., Suazo-Ortuño, I., Wilson, L.D., Medina-Aguilar, O., 2013. Patterns of physiographic distribution and conservation status of the herpetofauna of Michoacán, Mexico. Amphibian & Reptile Conservation, 7(1): 128-170.

Anderson, C.G., Greenbaum, E., 2012. Phylogeography of northern populations of the black-tailed rattlesnake (*Crotalus molossus* Baird and Girard, 1853), with the revalidation of *C. ornatus* Hallowell, 1854. Herpetological Monographs, 26(1): 19-57.

Barbo, F. E., Grazziotin, F.G., Sazima, I., Martins, M., Sawaya, R. J., 2012. A new and threatened insular species of lancehead from Southeastern Brazil. Herpetologica, 68(3): 418-429.

Barros, A.B, Feio, R.N., 2011. Herpetofauna do Parque Nacional da Serra da Canastra, Minas Gerais, Brasil. MSc Thesis, Universidade Federal de Viçosa, Brazil.

Bryson Jr, R.W., Linkem, C.W., Dorcas, M.E., Lathrop, A., Jones, J.M., Alvarado-Diaz, J., GRÜNWALD, C.I., Murphy, R.W., 2014. Multilocus species delimitation in the *Crotalus triseriatus* species group (Serpentes: Viperidae: Crotalinae), with the description of two new species. Zootaxa, 3826(3): 475-496.

Campbell, J.A., 1979. A new rattlesnake (Reptilia, Serpentes, Viperidae) from Jalisco, Mexico. Transactions of the Kansas Academy of Science (1903): 365-369.

Campbell, J.A., Flores-Villela, O., 2008. A new long-tailed rattlesnake (Viperidae) from Guerrero, Mexico. Herpetologica, 64(2): 246-257.

Campbell, J.A., Lamar, W.W., 2004. The venomous reptiles of the Western Hemisphere. 1 Volvs. Cornell University Press, 2004.

Carbajal-Márquez, R.A., Cedeño-Vázquez, J.R., González-Solís, D., Martins, M. (in press). Diet and Feeding Ecology of Crotalus tzabcan (Serpentes: Viperidae). South American Journal of Herpetology.

Douglas, M.E., Douglas, M.R., Schuett, G.W., Porras, L.W., Thomason, B.L., 2007. Genealogical concordance between mitochondrial and nuclear DNAs supports species recognition of the Panamint rattlesnake (Crotalus mitchellii stephensi). Copeia, 2007(4): 920-932.

Folleco-Fernandes, A.J., 2010. Taxonomía del complejo *Bothrops asper* (Serpentes: Viperidae) en el sudoeste de Colombia. Revalidación de la especie *Bothrops rhombeatus* (García 1896) y descripción de una nueva especie. Revista Novedades Colombianas, 10(1), 33-70.

Grismer, L.L., 2002. Amphibians and Reptiles of Baja California, Including its Pacific Islands and the Islands in the Sea of Cortes. Berkeley, CA: University of California Press.

Guerreiro, A., Baldoni, J.C., Brigada, A.M., 2005. Herpetofauna from Sierra de las Quijadas (San Luis, Argentina), Gayana, 69(1): 6-9.

Hartmann, M.T., Hartmann, P.A., Cechin, S.Z., Martins, M. 2005. Feeding habits and habitat use in *Bothrops pubescens* (Viperidae, Crotalinae) from Southern Brazil. Journal of Herpetology, 39(4): 664-667.

Jadin, R.C., Smith, E.N., Campbell, J.A., 2011. Unravelling a tangle of Mexican serpents: a systematic revision of highland pitvipers. Zoological Journal of the Linnean Society, 163(3): 943-958.

Jadin, R.C., Townsend, J.H., Castoe, T.A., Campbell, J A., 2012. Cryptic diversity in disjunct populations of Middle American Montane Pitivipers: a systematic reassessment of *Cerrophidion godmani*. Zoologica Scripta, 41(5), 455-470.

Kacoliris, F., Horlent, N., Williams, J., 2006. Herpetofauna, Coastal Dunes, Buenos Aires Province, Argentina. Check List, 2(3): 15-21.

Lema, T. de, 1987. Lista preliminar das serpentes registradas para o Estado do Rio Grande do Sul (Brasil Meridional) (Reptilia, Lepidosauria, Squamata). Acta Biologica leopoldensia, 9(2): 225 - 240.

Martins, M., Marques, O.A.V., Sazima. I., 2002. Ecological and phylogenetic correlates of feeding habits in Neotropical pitvipers (Genus *Bothrops*). Pp. 307-328, pls. 7-8 in Schuett, G.W., Höggren, M., Douglas, M.E., Greene, H.W. (Eds.), Biology of the vipers. Eagle Mountain Publishing, Eagle Mountain.

Mata-Silva, V., Johnson, J.D., Wilson, L.D., García-Padilla, E., 2015. The herpetofauna of Oaxaca, Mexico: composition, physiographic distribution, and conservation status. Mesoamerican Herpetology, 2(1): 6-62.

Nogueira, C.C., Sawaya, R.J., Martins, M., 2003. Ecology of the pitviper, *Bothrops moojeni*, in the Brazilian Cerrado. Journal of Herpetology 37(4): 653-659.

Nori, J., Diaz Gomez, J.M., Leynaud, G.C., 2011. Biogeographic regions of Central Argentina based on snake distribution: evaluating two different methodological approaches. Journal of Natural History, 45(17-18): 1005-1020.

Norman, D.R., 1994. Anfibios y reptiles del Chaco paraguayo, Tomo 1. Amphibians and Reptiles of the Paraguayan Chaco, Volume 1. Private printing, San José, Costa Rica.

Howard, K., Lauretta, M., Gian, L., Rocco, M.G., Odum, R.A., 2002. Distribution of the Aruba Island rattlesnake, *Crotalus unicolor*, on Aruba, Dutch West Indies. Caribbean Journal of Science, 38(1-2): 126-128.

Rodrigues, G. M., Maschio, G. F., Prudente, A. L. C., 2016. Snake assemblages of Marajó Island, Pará state, Brazil. Zoologia (Curitiba), 33(1): e20150020.

Sawaya, R.J., Marques, O.A.V., Martins, M., 2008. Composition and natural history of a Cerrado snake assemblage at Itirapina, São Paulo state, southeastern Brazil. Biota Neotropica, 8,129-151.

Silva, V.X., Rodrigues, M.T., 2008. Taxonomic revision of the *Bothrops neuwied*i complex (Serpentes, Viperidae) with description of a new species. Phyllomedusa: Journal of Herpetology, 7(1): 45-90.

Smith, E.N., Ferrari-Castro, J.A., 2008. A new species of jumping pitviper of the genus *Atropoides* (Serpentes: Viperidae: Crotalinae) from the Sierra de Botaderos and the Sierra La Muralla, Honduras. Zootaxa, 1948: 57-68.

Townsend, J.H., Medina-Flores, M., Wilson, L.D., Jadin, R.C., Austin, J.D., 2013. A relict lineage and new species of green palm-pitviper (Squamata, Viperidae, *Bothriechis*) from the Chortís Highlands of Mesoamerica. ZooKeys, 298(77).

**Table S3.** Species abundance of New World pitvipers. The column “Abundance” (rare = 1, frequent = 2 and abundant = 3) is based on literature information for each species and LA is the category considered in our analyses based on the previous column (low local abundance for 1 in previous column, high local abundance for 2 and 3).

|  |  |  |  |
| --- | --- | --- | --- |
| **Species** | **Abundance** | **LA** | **Reference** |
| *Agkistrodon bilineatus* | 2 | high | Campbell and Lamar, 2004 |
| *Agkistrodon contortrix* | 3 | high | Campbell and Lamar, 2004 |
| *Agkistrodon howardgloydi* | 2 | high | Goyd and Connant, 1989 |
| *Agkistrodon piscivorus* | 3 | high | Campbell and Lamar, 2004 |
| *Agkistrodon russeolus* | 1 | low | Goyd and Connant, 1989 |
| *Agkistrodon taylori* | 2 | high | Campbell and Lamar, 2004; Gloyd and Conant, 1989 |
| *Atropoides indomitus* |  |  |  |
| *Atropoides mexicanus* | 2 | high | Campbell and Lamar, 2004 |
| *Atropoides nummifer* | 2 | high | Campbell, 1998; Campbell and Lamar, 2004 |
| *Atropoides occiduus* |  |  |  |
| *Atropoides olmec* |  |  |  |
| *Atropoides picadoi* | 1 | low | Savage, 2002; Solorzano, 2004 |
| *Bothriechis aurifer* | 3 | high | Campbell and Lamar, 2004 |
| *Bothriechis bicolor* |  |  |  |
| *Bothriechis guifarroi* | 2 | high | Townsend et al., 2013 |
| *Bothriechis lateralis* | 2 | high | Savage, 2002 |
| *Bothriechis marchi* | 2 | high | Wilson and Townsend, 2006 |
| *Bothriechis nigroviridis* | 1 | low | Savage, 2002; Solorzano, 2004 |
| *Bothriechis rowleyi* | 1 | low | Savage, 2002; Campbell and Lamar, 2004 |
| *Bothriechis schlegelii* | 2 | high | Savage, 2002; Campbell and Lamar, 2004; Solorzano, 2004 |
| *Bothriechis supraciliaris* | 1 | low | Solorzano, 2004 |
| *Bothriechis thalassinus* | 2 | high | Campbell and Lamar, 2004 |
| *Bothrocophias andianus* | 2 | high | Embert, 2007 |
| *Bothrocophias campbelli* | 1 | low | Arteaga et al., 2013 |
| *Bothrocophias colombianus* |  |  |  |
| *Bothrocophias hyoprora* | 1 | low | Campbell and Lamar, 2004 |
| *Bothrocophias microphthalmus* | 1 | low | Embert, 2007 |
| *Bothrocophias myersi* |  |  |  |
| *Bothrops alcatraz* | 2 | high | Martins, M., pers. comm. |
| *Bothrops alternatus* | 2 | high | Martins, M., pers. comm. |
| *Bothrops ammodytoides* | 2 | high | Martins, M., pers. comm. |
| *Bothrops asper* | 2 | high | Martins, M., pers. comm. |
| *Bothrops atrox* | 2 | high | Martins, M., pers. comm. |
| *Bothrops ayerbei* | 2 | high | Folleco-Fernandez, 2010 |
| *Bothrops barnetti* |  |  |  |
| *Bothrops bilineatus* | 1 | low | Martins, M., pers. comm. |
| *Bothrops brazili* | 1 | low | Martins, M., pers. comm. |
| *Bothrops caribbaeus* | 2 | high | Schwartz and Henderson, 1991; Daltry, 2009 |
| *Bothrops chloromelas* |  |  |  |
| *Bothrops cotiara* | 2 | high | Martins, M., pers. comm. |
| *Bothrops diporus* | 2 | high | Martins, M., pers. comm. |
| *Bothrops erythromelas* | 2 | high | Martins, M., pers. comm. |
| *Bothrops fonsecai* | 2 | high | Martins, M., pers. comm. |
| *Bothrops insularis* | 3 | high | Martins, M., pers. comm. |
| *Bothrops itapetiningae* | 2 | high | Martins, M., pers. comm. |
| *Bothrops jararaca* | 2 | high | Martins, M., pers. comm. |
| *Bothrops jararacussu* | 2 | high | Martins, M., pers. comm. |
| *Bothrops jonathani* | 2 | high | Embert, 2007 |
| *Bothrops lanceolatus* | 2 | high | Schwartz and Henderson, 1991 |
| *Bothrops leucurus* | 2 | high | Argôlo, 2004 |
| *Bothrops lojanus* |  |  |  |
| *Bothrops lutzi* | 2 | high | Guedes T., pers. comm. |
| *Bothrops marajoensis* | 2 | high | Martins, M., pers. comm. |
| *Bothrops marmoratus* | 2 | high | França and Braz, 2013; Nogueira, C.C., pers. comm. |
| *Bothrops matogrossensis* | 2 | high | Martins, M., pers. comm. |
| *Bothrops medusa* |  |  |  |
| *Bothrops moojeni* | 2 | high | Martins, M., pers. comm. |
| *Bothrops muriciensis* | 1 | low | Freitas et al., 2012 |
| *Bothrops neuwiedi* | 2 | high | Martins, M., pers. comm. |
| *Bothrops oligolepis* | 1 | low | Embert, 2007 |
| *Bothrops osbornei* |  |  |  |
| *Bothrops otavioi* | 2 | high | Barbo et al. 2012 |
| *Bothrops pauloensis* | 3 | high | Martins, M., pers. comm. |
| *Bothrops pictus* | 2 | high | Campbell and Lamar, 2004 |
| *Bothrops pirajai* | 1 | low | Freitas, 2008 |
| *Bothrops pubescens* | 2 | high | Hartmann et al., 2005 |
| *Bothrops pulchra* |  |  |  |
| *Bothrops punctatus* | 1 | low | Betancourt Yépez, 2002 |
| *Bothrops rhombeatus* | 2 | high | Folleco-Fernández, 2010. |
| *Bothrops sanctaecrucis* | 2 | high | Embert, 2007 |
| *Bothrops taeniatus* | 1 | low | Martins, M., pers. comm. |
| *Bothrops venezuelensis* | 2 | high | Lotzkat, 2007; Silva et al., 1985 |
| *Cerrophidion godmani* | 2 | high | Wilson and McCranie, 2004.; Wilson and Townsend, 2006. |
| *Cerrophidion petlalcalensis* | 2 | high | Lopez-Luna et al., 1999 |
| *Cerrophidion sasai* | 2 | high | Solorzano, 2004 |
| *Cerrophidion tzotzilorum* | 2 | high | Campbell and Lamar, 2004 |
| *Cerrphidion wilsoni* | 2 | high | Jadin et al., 2012 |
| *Crotalus adamanteus* | 2 | high | Campbell and Lamar, 2004; Martin and Means, 2000. |
| *Crotalus angelensis* | 3 | high | Klauber, 1963. |
| *Crotalus aquilus* | 2 | high | Campbell and Lamar, 2004 |
| *Crotalus armstrongi* | 2 | high | Campbell, 1978 |
| *Crotalus atrox* | 2 | high | Campbell and Lamar, 2004; Martins, M., pers. comm. |
| *Crotalus basiliscus* | 2 | high | Armstrong and Murphy, 1979 |
| *Crotalus caliginis* | 3 | high | Grismer, 2002 |
| *Crotalus campbelli* |  |  |  |
| *Crotalus catalinensis* | 3 | high | Martins, M., pers. comm. |
| *Crotalus cerastes* | 2 | high | Grismer, 2002 |
| *Crotalus cerberus* | 2 | high | Flesch et al., 2010 |
| *Crotalus culminatus* | 2 | high | Davis and Smith, 1953; Duellman, 1961; Armstrong and Murphy, 1979 |
| *Crotalus durissus* | 2 | high | Martins, M., pers. comm. |
| *Crotalus enyo* | 2 | high | Grismer, 2002 |
| *Crotalus ericsmithi* |  |  |  |
| *Crotalus estebanensis* | 3 | high | Grismer, 2002 |
| *Crotalus horridus* | 2 | high | Mohr, 2012 |
| *Crotalus intermedius* | 2 | high | Armstrong and Murphy, 1979 |
| *Crotalus lannomi* | 1 | low | Reyes-Velasco et al., 2010. |
| *Crotalus lepidus* | 2 | high | Martins, M., pers. comm.; Armstrong and Murphy, 1979 |
| *Crotalus lorenzoensis* | 2 | high | Grismer, 2002 |
| *Crotalus mitchelii* | 2 | high | Armstrong and Murphy, 1979 |
| *Crotalus molossus* | 2 | high | Martins, M., pers. comm.; Armstrong and Murphy, 1979 |
| *Crotalus muertensis* | 3 | high | Grismer, 2002 |
| *Crotalus oreganus* | 2 | high | Campbell and Lamar, 2004; Putman et al., 2013 |
| *Crotalus ornatus* | 2 | high | Axtel, 1959. |
| *Crotalus polystictus* | 3 | high | Setser et al., 2010 |
| *Crotalus pricei* | 2 | high | Martins, M., pers. comm.; Armstrong and Murphy, 1979 |
| *Crotalus pyrrhus* |  |  |  |
| *Crotalus pussillus* | 2 | high | Armstrong and Murphy, 1979 |
| *Crotalus ravus* | 2 | high | Campbell and Armstrong, 1979. |
| *Crotalus ruber* | 2 | high | Martins, M., pers. comm.; Armstrong and Murphy, 1979 |
| *Crotalus scutulatus* | 2 | high | Martins, M., pers. comm.; Klauber, 1956 |
| *Crotalus simus* | 2 | high | Solorzano, 2004 |
| *Crotalus stejnegeri* | 1 | low | Hardy and McDiarmid, 1969 |
| *Crotalus stephensi* | 2 | high | Klauber, 1956 |
| *Crotalus tancitarensis* | 2 | high | Alvarado-Díaz et al., 2007 |
| *Crotalus tigris* | 2 | high | Goode et al., 2008 |
| *Crotalus tlaloci* | 2 | high | Bryson et al., 2014 |
| *Crotalus tortugensis* | 3 | high | Martins, M., pers. comm.; Grismer, 200 |
| *Crotalus totonacus* | 2 | high | Armstrong and Murphy, 1979 |
| *Crotalus transversus* | 2 | high | Armstrong and Murphy, 1979 |
| *Crotalus triseriatus* | 2 | high | Armstrong and Murphy, 1979 |
| *Crotalus tzabcan* | 3 | high | Armstrong and Murphy, 1979 |
| *Crotalus unicolor* | 1 | low | Odum and Reinert, 2015 |
| *Crotalus viridis* | 2 | high | Pendlebury, 1977; Armstrong and Murphy, 1979 |
| *Crotalus willardi* | 2 | high | Armstrong & Murphy, 1979; Holycross and Goldberg, 2001. |
| *Lachesis acrochorda* | 1 | low | Duque and Corrales, 2015 |
| *Lachesis melanocephala* | 1 | low | Solorzano, 2004 |
| *Lachesis muta* | 1 | low | Martins, M., pers. comm.; Duelman, 1978; Martins and Oliveira, 1998 |
| *Lachesis stenophrys* | 1 | low | Solorzano, 2004 |
| *Mixcoatlus barbouri* | 1 | low | Campbell, 1988 |
| *Mixcoatlus browni* | 1 | low | Campbell, 1988; Jadin et al., 2011 |
| *Mixcoatlus melanurus* | 2 | high | Canseco-Márquez and Gutiérrez-Mayén, 2010 |
| *Ophryacus undulatus* | 2 | high | Lopez-Luna et al., 1999 |
| *Porthidium arcosae* | 3 | high | Valencia et al., 2012 |
| *Porthidium dunni* |  |  |  |
| *Porthidium hespere* |  |  |  |
| *Porthidium lansbergii* | 3 | high | Campbell and Lamar, 2004 |
| *Porthidium nasutum* | 2 | high | Solorzano, 2004 |
| *Porthidium ophryomegas* | 2 | high | Solorzano, 2004 |
| *Porthidium porrasi* | 1 | low | Solorzano, 2004 |
| *Porthidium volcanicum* | 1 | low | Solorzano, 2004 |
| *Porthidium yucatanicum* | 2 | high | Lee, 2000 |
| *Sistrurus catenatus* | 3 | high | Holycross and Douglas, 1996; Campbell and Lamar, 2004; Hobert et al., 2004. |
| *Sistrurus miliarius* | 3 | high | Campbell and Lamar, 2004; May and Ferrel, 2012 |

References cited in Table S3

Alvarado-Diaz, J., Estrada-Virgen, A., Suazo-Ortuno, I., 2007. Natural history notes on *Crotalus tancitarensis* (Serpentes: Viperidae). Herpetological Review, 38(2): 155-157.

Armstrong, B.L., Murphy, J.B., 1979. The natural history of Mexican rattlesnakes. Natural History Museum, University of Kansas.

Argôlo, A.J.S., 2004. As serpentes dos cacauais do sudeste da Bahia. EDITUS - Editora da UESC, Universidade Estadual de Santa Cruz, Ilhéus, Bahia, Brazil.

Arteaga, A.F., Bustamante-Enríquez, L.M., Guayasamin, J.M., 2013. The amphibians and reptiles of Mindo. Quito, Universidad Tecnológica Indoamérica.

Axtell, R.W., 1959. Amphibians and reptiles of the Black Gap Wildlife Management Area, Brewster County, Texas. The Southwestern Naturalist: 88-109.

Barbo, F. E., F. G. Grazziotin, I. Sazima, M. Martins & R. J. Sawaya. 2012. A new and threatened insular species of lancehead from southeastern Brazil. Herpetologica 68:418-429.

Betancourt Yépez, R.M., 2012. Incidencia, zonas de riesgo y prevención de accidentes ofídicos en áreas rurales de Manabí y Los Ríos, Ecuador. Años 2007 a 2009.

Bryson Jr, R.W., Linkem, C.W., Dorcas, M.E., Lathrop, A., Jones, J.M., Alvarado-Diaz, J., GRÜNWALD, C.I., Murphy, R.W., 2014. Multilocus species delimitation in the *Crotalus triseriatus* species group (Serpentes: Viperidae: Crotalinae), with the description of two new species. Zootaxa, 3826(3): 475-496.

Campbell, J.A., 1978. A new rattlesnake (Reptilia, Serpentes, Viperidae) from Jalisco, Mexico. Transactions of the Kansas Academy of Science, 81(4), 365-369.

Campbell, J.A., 1988. The distribution, variation, natural history, and relationships of *Porthidium barbouri* (Viperidae). Acta Zoológica Mexicana, 26: 1-32.

Campbell, J.A., 1998. Amphibians and Reptiles of Northern Guatemala, the Yucatán, and Belize. University of Oklahoma Press, Norman, USA.

Campbell, J.A., Armstrong, B.L., 1979. Geographic variation in the Mexican pygmy rattlesnake, *Sistrurus ravus*, with the description of a new subspecies. Herpetologica: 304-317.

Campbell, J.A., Lamar, W.W., 2004. The venomous reptiles of the Western Hemisphere. 1 Volvs. Cornell University Press, 2004.

Canseco-Márquez, L.M., Gutiérrez-Mayén, M.G., 2010. Anfibios y reptiles del Valle de Tehuacán- Cuicatlán. Comisión Nacional para el Conocimiento y Uso de la Biodiversidad, Fundación para la Reserva de la Biosfera Cuicatlán A. C., Benemérita Universidad Autónoma de Puebla. México, D.F.

Daltry, J.C., 2009. The status and management of Saint Lucia’s forest reptiles and amphibians. Technical Report to the National Forest Demarcation and Bio-Physical Resource Inventory Project.

Davis, W.B., Smith, H.M., 1953. Snakes of the Mexican state of Morelos. Herpetologica, 8(4): 133-143.

Duellman, W.E., 1961. The amphibians and reptiles of Michoacán, México. University of Kansas publications, Museum of Natural History, 15:1-148.

Duellman, W.E. 1978. The biology of an equatorial herpetofauna in Amazonian Ecuador. Misc. Publ. Mus. Nat. Hist. Univ. Kansas, 65, 1-352.

Duque, A.M.H., Corrales, G., 2015. First report of the reproduction in captivity of the Chocoan Bushmaster, *Lachesis acrochorda* (García, 1896). Herpetology Notes, 8: 315-320.

Embert, D, 2007. Distribution, diversity and conservation status of Bolivian reptiles. Forchungsarbeit zur Erlangung des Doktorgrades, Mathematisch-Naturwissenschaftliche Fakultät, Rheinische Friedrich-Wilhelms-Univerität Bonn.

Flesch, A.D., Swann, D.E., Turner, D.S., Powell, B.F., 2010. Herpetofauna of the Rincon Mountains, Arizona. The Southwestern Naturalist, 55(2): 240-253.

Folleco-Fernandes, A.J., 2010. Taxonomía del complejo *Bothrops asper* (Serpentes: Viperidae) en el sudoeste de Colombia. Revalidación de la especie *Bothrops rhombeatus* (García 1896) y descripción de una nueva especie. Revista Novedades Colombianas, 10(1), 33-70.

França, F.G.R., Braz, V.D.S., 2013. Diversity, activity patterns, and habitat use of the snake fauna of Chapada dos Veadeiros National Park in Central Brazil. Biota Neotropica, 13(1): 74-84.

Freitas, M.A., 2008. Distribuição geográfica, história natural e avaliação do status de conservação da jaracuçu-tapete *Bothrops pirajai* Amaral, 1923 (Doctoral dissertation, MSc Thesis, Universidade Estadual de Santa Cruz, Ilhéus, Brazil).

Freitas, M.A., França, F., Pereira, D., Graboski, R., Uhlig, V., & Veríssimo, D., 2012. Notes on the conservation status, geographic distribution and ecology of *Bothrops muriciensis* Ferrarezzi & Freire, 2001 (Serpentes, Viperidae). North-Western Journal of Zoology, 8(2).

Goode, M., Smith, J.J., Amarello, M., 2008. Seasonal and annual variation in home range and movements of Tiger Rattlesnakes (*Crotalus tigris*) in the Sonoran Desert of Arizona. The Biology of Rattlesnakes. WK Hayes, KR Beaman, MD Cardwell, and SP Bush (eds.). Loma Linda University Press, Loma Linda, California, 327-334.

Goyd, H.K., Conant, R., 1989. Snakes of the *Agkistrodon* complex. A monographic review. Contributions to Herpetology, Number 6. K. Adler. Soc. Stud. Amphib. Rept., Ithaca, New York.

Grismer, L.L., 2002. Amphibians and Reptiles of Baja California, Including its Pacific Islands and the Islands in the Sea of Cortes. Berkeley, CA: University of California Press.

Hardy, L.M., McDiarmid, R.W., 1969. The amphibians and reptiles of Sinaloa, Mexico.

Hartmann, M.T., Hartmann, P.A., Cechin, S.Z., Martins, M. 2005. Feeding habits and habitat use in *Bothrops pubescens* (Viperidae, Crotalinae) from Southern Brazil. Journal of Herpetology, 39(4): 664-667.

Hobert, J.P., Montgomery, C.E., Mackessy, S.P, 2004. Natural history of the massasauga, *Sistrurus catenatus edwardsii*, in southeastern Colorado. The Southwestern Naturalist, 49(3): 321-326.

Holycross, A.T., Douglas, M.E., 1996. Distribution, abundance, and ecology of the desert massasauga rattlesnake, *Sistrurus catenatus edwardsi*. Arizona Game and Fish Department.

Holycross, A.T., Goldberg, S.R., 2001. Reproduction in northern populations of the ridgenose rattlesnake, *Crotalus willardi* (Serpentes: Viperidae). Copeia, 2001(2): 473-481.

Jadin, R.C., Smith, E.N., Campbell, J.A., 2011. Unravelling a tangle of Mexican serpents: a systematic revision of highland pitvipers. Zoological Journal of the Linnean Society, 163(3): 943-958.

Jadin, R.C., Townsend, J.H., Castoe, T.A., Campbell, J A., 2012. Cryptic diversity in disjunct populations of Middle American Montane Pitivipers: a systematic reassessment of *Cerrophidion godmani*. Zoologica Scripta, 41(5), 455-470.

Klauber, L.M., 1956. Rattlesnakes: Their Habits, Life Histories, and Influence on Mankind. 2 Vols, 2nd ed. University of California Press.

Klauber, L.M., 1963. A new insular subspecies of the speckled rattlesnake. Trans San Diego Soc Nat Hist, 13: 73-80.

Lee, J.C., 2000. A field guide to the amphibians and reptiles of the Maya world: the lowlands of Mexico, northern Guatemala, and Belize.

López-Luna, M.A., Vogt, R.C., Torre-Loranca, M.A., 1999. A new species of montane pitviper from Veracruz, Mexico. Herpetologica: 382-389.

López-Luna, M.A., Vogt, R.C., Torre-Loranca, M.A., 1999. A new species of montane pitviper from Veracruz, Mexico. Herpetologica: 382-389.

Lotzkat, S., 2007. Taxonomía y zoogeografía de la herpetofauna del macizo de Nirgua, Venezuela. Unpublished PhD Thesis, Johann Wolfgang Goethe Universität, Frankfurt am Main, Germany.

Martin, W.H., Means, D.B., 2000. Distribution and habitat relationships of the eastern diamondback rattlesnake (*Crotalus adamanteus*). Herpetological Natural History, 7(1): 9-34.

Martins, M., Oliveira, M.E., 1998. Natural history of snakes in forests of the Manaus region, Central Amazonia, Brazil. Herpetological Natural History, 6(2), 78-150.

May, P.G., Farrell, T.M., 2012. Growth patterns of dusky pygmy rattlesnakes (*Sistrurus miliarius barbouri*) from central Florida. Herpetological Monographs, 26(1): 58-79.

Mohr, J. R. 2012. Movements of the timber rattlesnake (*Crotalus horridus*) in the South Carolina mountains. Bulletin of the Florida Museum of Natural History 51(2): 269-278.

Odum, R.A., Reinert, H.K., 2015. The Aruba Island rattlesnake *Crotalus unicolor* Species Survival Plan: a case history in ex situ and in situ conservation. International zoo yearbook, 49(1): 104-112.

Pendlebury, G.B. 1977. Distribution and abundance of the Prairie Rattlesnake, *Crotalus viridis viridis*, in Canada. Canadian Field-Naturalist 91(2): 122- 129

Putman, B.J., Lind, C., Taylor, E.N., 2013. Does size matter? Factors influencing the spatial ecology of Northern Pacific rattlesnakes (*Crotalus oreganus oreganus*) in Central California. Copeia, 2013(3): 485-492.

Reyes-Velasco, J.A.C.O.B.O., Grünwald, C.I., Jones, J.M., Weatherman, G.N., 2010. Rediscovery of the rare Autlán long-tailed rattlesnake, *Crotalus lannomi*. Herpetological Review, 41(1): 19.

Savage, J.M., 2002. The amphibians and reptiles of Costa Rica: a herpetofauna between two continents, between two seas. University of Chicago press.

Schwartz, A., Henderson, R.W., 1991. Amphibians and reptiles of the West Indies. Descriptions, Distributions and Natural History. University of Florida Press, Gainesville, Florida, USA Google Scholar.

Setser, K., Mociño-Deloya, E., Pleguezuelos, J.M., Lazcano, D., Kardon, A., 2010. Reproductive ecology of female Mexican lance-headed rattlesnakes. Journal of Zoology, 281(3): 175-182.

Silva, L.J.L., Valdez, J., Ojasti, J., 1985. Algunos aspectos de una comunidad de ofidios del norte de Venezuela. Biotropica: 112-125.

Solórzano, A.L., 2004. Snakes of Costa Rica: Distribution, taxonomy, and natural history. Instituto Nacional de Biodiversidad (INBio).

Townsend, J.H., Medina-Flores, M., Wilson, L.D., Jadin, R.C., Austin, J.D., 2013. A relict lineage and new species of green palm-pitviper (Squamata, Viperidae, *Bothriechis*) from the Chortís Highlands of Mesoamerica. ZooKeys, 298(77).

Valencia, J.H., Vaca-Guerrero, G., Garzon, K., 2010. Natural history, potential distribution and conservation status of the Manabi Hognose Pitviper *Porthidium arcosae* (SCHÄTTI & KRAMER, 1993), in Ecuador. Herpetozoa, 23: 31-43.

Wilson, L.D., McCranie, J.R., 2004. The herpetofauna of the cloud forests of Honduras. Amphibian and Reptile Conservation, 3(1): 34.

Wilson, L.D., Townsend, J.H., 2006. The herpetofauna of the rainforests of Honduras. Caribbean Journal of Science, 42(1): 88.

**Table S4.** Geographical range (GR1, in km2), Extent of occurrence (EOO, cf. IUCN), region of the New World (CEAM = Central America; CISA = Cisandean South America; ISLA = island endemics; TRSA = Transandean South America; USNM = United States and northern Mexico), IUCN category (LC = Least concern; DD = Data deficient; NT = Near threatened; VU = Vulnerable; EN = Endangered; CR = Critically endangered), source of IUCN category (BRZ = Brazilian assessment by ICMBio; IUCN = IUCN Red List; SIS = IUCN Species Information System; TS = this study), rarity variables (GR2 = geographical range; HB = habitat breadth; LA = local abundance), rarity cell in Rabinowitz “seven forms of rarity” (see Fig. 1), and rarity category (NR = Not rare; LI = Low intermediate; HI = High intermediate; RT = Rarest) for all species of New World pitvipers.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  | **Rarity Variables** | | |  |  |
| **Species** | **GR1** | **EOO** | **Region**  **of NW** | **IUCN Category** | **Source**  **IUCN** | **GR2** | **HB** | **LA** | **Rarity cell** | **Rarity category** |
| *Agkistrodon bilineatus* | 452765 | 845994 | CEAM | NT | IUCN | large | narrow | high | B | LI |
| *Agkistrodon contortrix* | 2536350 | 2710552 | USNM | LC | IUCN | large | narrow | high | B | LI |
| *Agkistrodon howardgloydi* | 11231 | 18341 | CEAM | CR | IUCN | small | narrow | high | F | HI |
| *Agkistrodon piscivorus* | 1947771 | 2649516 | USNM | LC | IUCN | large | narrow | high | B | LI |
| *Agkistrodon russeolus* | 106131 | 106131 | CEAM | LC | TS | large | narrow | low | D | HI |
| *Agkistrodon taylori* | 115996 | 141834 | CEAM | LC | IUCN | large | narrow | high | B | LI |
| *Atropoides indomitus* | 6756 | 6756 | CEAM | EN | IUCN | small | narrow |  |  |  |
| *Atropoides mexicanus* | 210317 | 463491 | CEAM | LC | TS | large | broad | high | A | NR |
| *Atropoides nummifer* | 96134 | 96134 | CEAM | LC | IUCN | large | narrow | high | B | LI |
| *Atropoides occiduus* | 24846 | 24846 | CEAM | LC | IUCN | small | narrow |  |  |  |
| *Atropoides olmec* | 28997 | 29997 | CEAM | LC | IUCN | small | narrow |  |  |  |
| *Atropoides picadoi* | 26506 | 29749 | CEAM | LC | IUCN | small | narrow | high | F | HI |
| *Bothriechis aurifer* | 7287 | 7287 | CEAM | CR | IUCN | small | narrow | high | F | HI |
| *Bothriechis bicolor* | 6485 | 6485 | CEAM | LC | IUCN | small | narrow |  |  |  |
| *Bothriechis guifarroi* | 350 | 350 | CEAM | LC | IUCN | small | narrow | high | F | HI |
| *Bothriechis lateralis* | 30580 | 30580 | CEAM | CR | BRZ | small | narrow | high | F | HI |
| *Bothriechis marchi* | 23843 | 23843 | CEAM | LC | IUCN | small | narrow | high | F | HI |
| *Bothriechis nigroviridis* | 13493 | 13493 | CEAM | LC | IUCN | small | narrow | high | F | HI |
| *Bothriechis rowleyi* | 5155 | 5155 | CEAM | LC | IUCN | small | narrow | high | F | HI |
| *Bothriechis schlegelii* | 604878 | 1895656 | CEAM | LC | TS | large | narrow | high | B | LI |
| *Bothriechis supraciliaris* | 2087 | 2087 | CEAM | CR | IUCN | small | narrow | high | F | HI |
| *Bothriechis thalassinus* | 10375 | 10375 | CEAM | CR | IUCN | small | narrow | low | H | RT |
| *Bothrocophias andianus* | 89980 | 128237 | CISA | LC | TS | large | narrow | high | B | LI |
| *Bothrocophias campbelli* | 66182 | 71817 | TRSA | EN | BRZ | small | narrow | low | H | RT |
| *Bothrocophias colombianus* | 11695 | 23002 | TRSA | LC | TS | small | narrow |  |  |  |
| *Bothrocophias hyoprora* | 2560838 | 2560838 | CISA | LC | TS | large | narrow | low | D | HI |
| *Bothrocophias microphthalmus* | 467474 | 820634 | CISA | LC | TS | large | narrow | low | D | HI |
| *Bothrocophias myersi* | 7723 | 7723 | TRSA | LC | IUCN | small | narrow |  |  |  |
| *Bothrops alcatraz* | 1 | 1.7 | ISLA | DD | IUCN | small | narrow | high | F | HI |
| *Bothrops alternatus* | 2970926 | 3205366 | CISA | LC | TS | large | narrow | high | B | LI |
| *Bothrops ammodytoides* | 1414479 | 1623864 | CISA | LC | TS | large | narrow | high | B | LI |
| *Bothrops asper* | 1161517 | 4744629 | CEAM | LC | TS | large | broad | high | A | NR |
| *Bothrops atrox* | 5427350 | 6182115 | CISA | LC | TS | large | narrow | high | B | LI |
| *Bothrops ayerbei* | 740 | 740 | TRSA | DD | IUCN | small | narrow | low | H | RT |
| *Bothrops barnetti* | 43315 | 43315 | TRSA | VU | TS | small | narrow |  |  |  |
| *Bothrops bilineatus* | 6015259 | 9625716 | CISA | LC | TS | large | narrow | low | D | HI |
| *Bothrops brazili* | 4503640 | 4503640 | CISA | LC | TS | large | narrow | low | D | HI |
| *Bothrops caribbaeus* | 617 | 617 | ISLA | DD | IUCN | small | narrow | high | F | HI |
| *Bothrops chloromelas* | 66187 | 98842 | CISA | NT | TS | small | narrow |  |  |  |
| *Bothrops cotiara* | 236077 | 236077 | CISA | LC | BRZ | large | broad | high | A | NR |
| *Bothrops diporus* | 1817149 | 1855211 | CISA | LC | BRZ | large | broad | high | A | NR |
| *Bothrops erythromelas* | 758901 | 758901 | CISA | LC | IUCN | large | narrow | high | B | LI |
| *Bothrops fonsecai* | 53802 | 65945 | CISA | DD | TS | small | broad | high | E | LI |
| *Bothrops insularis* | 0 | 0.4 | ISLA | DD | TS | small | narrow | high | F | HI |
| *Bothrops itapetiningae* | 792714 | 792714 | CISA | NT | IUCN | large | narrow | high | B | LI |
| *Bothrops jararaca* | 1664975 | 1774573 | CISA | LC | BRZ | large | narrow | high | B | LI |
| *Bothrops jararacussu* | 1146854 | 1420143 | CISA | LC | IUCN | large | narrow | high | B | LI |
| *Bothrops jonathani* | 187779 | 219609 | CISA | LC | TS | large | narrow | high | B | LI |
| *Bothrops lanceolatus* | 1128 | 1128 | ISLA | CR | TS | small | narrow | high | F | HI |
| *Bothrops leucurus* | 406304 | 499103 | CISA | LC | BRZ | large | narrow | high | B | LI |
| *Bothrops lojanus* | 1517 | 1517 | TRSA | EN | IUCN | small | narrow |  |  |  |
| *Bothrops lutzi* | 992894 | 992894 | CISA | LC | IUCN | large | narrow | high | B | LI |
| *Bothrops marajoensis* | 304653 | 304653 | CISA | LC | BRZ | large | broad | high | A | NR |
| *Bothrops marmoratus* | 400317 | 400317 | CISA | LC | BRZ | large | narrow | high | B | LI |
| *Bothrops matogrossensis* | 3021125 | 3142854 | CISA | LC | TS | large | narrow | high | B | LI |
| *Bothrops medusa* | 1931 | 1931 | CISA | DD | TS | small | narrow |  |  |  |
| *Bothrops moojeni* | 4213737 | 4213737 | CISA | LC | BRZ | large | broad | high | A | NR |
| *Bothrops muriciensis* | 81 | 149 | CISA | NT | SIS | small | narrow | high | F | HI |
| *Bothrops neuwiedi* | 951441 | 1405690 | CISA | LC | BRZ | large | broad | high | A | NR |
| *Bothrops oligolepis* | 99293 | 99293 | CISA | LC | IUCN | large | narrow | low | D | HI |
| *Bothrops osbornei* | 10966 | 10966 | TRSA | DD | TS | small | narrow |  |  |  |
| *Bothrops otavioi* | 2 | 2.2 | ISLA | LC | IUCN | small | narrow | high | F | HI |
| *Bothrops pauloensis* | 862740 | 967594 | CISA | LC | TS | large | narrow | high | B | LI |
| *Bothrops pictus* | 95117 | 151210 | TRSA | LC | TS | large | narrow | high | B | LI |
| *Bothrops pirajai* | 4639 | 4639 | CISA | LC | IUCN | small | narrow | high | F | HI |
| *Bothrops pubescens* | 208413 | 252974 | CISA | LC | TS | large | broad | high | A | NR |
| *Bothrops pulchra* | 91329 | 91329 | CISA | DD | SIS | large | narrow |  |  |  |
| *Bothrops punctatus* | 131339 | 131339 | TRSA | LC | SIS | large | narrow | low | D | HI |
| *Bothrops rhombeatus* | 343 | 343 | CISA | CR | TS | small | narrow | high | F | HI |
| *Bothrops sanctaecrucis* | 89487 | 89487 | CISA | LC | TS | large | narrow | high | B | LI |
| *Bothrops taeniatus* | 5438919 | 5438919 | CISA | LC | TS | large | narrow | low | D | HI |
| *Bothrops venezuelensis* | 71423 | 136570 | CISA | DD | IUCN | small | narrow | low | H | RT |
| *Cerrophidion godmani* | 101646 | 140137 | CEAM | LC | IUCN | large | narrow | high | B | LI |
| *Cerrophidion petlalcalensis* | 314 | 314 | CEAM | LC | IUCN | small | narrow | high | F | HI |
| *Cerrophidion sasai* | 8820 | 8820 | CEAM | LC | SIS | small | narrow | low | H | RT |
| *Cerrophidion tzotzilorum* | 883 | 883 | CEAM | LC | IUCN | small | narrow | low | H | RT |
| *Cerrphidion wilsoni* | 28773 | 28773 | CEAM | EN | IUCN | small | narrow | low | H | RT |
| *Crotalus adamanteus* | 298570 | 898032 | USNM | LC | IUCN | large | narrow | high | B | LI |
| *Crotalus angelensis* | 931 | 931 | ISLA | LC | SIS | small | narrow | high | F | HI |
| *Crotalus aquilus* | 140596 | 140596 | CEAM | LC | IUCN | large | broad | high | A | NR |
| *Crotalus armstrongi* | 15485 | 15485.2 | CEAM | VU | TS | small | narrow | high | F | HI |
| *Crotalus atrox* | 3091250 | 3598215 | CISA | LC | IUCN | large | broad | high | A | NR |
| *Crotalus basiliscus* | 110650 | 164864 | CEAM | LC | IUCN | large | narrow | high | B | LI |
| *Crotalus caliginis* | 2 | 1.8 | ISLA | EN | IUCN | small | narrow | low | H | RT |
| *Crotalus campbelli* | 4418 | 4418.2 | CEAM | NT | TS | small | narrow |  |  |  |
| *Crotalus catalinensis* | 41 | 41 | ISLA | VU | IUCN | small | narrow | low | H | RT |
| *Crotalus cerastes* | 411102 | 463389 | USNM | LC | IUCN | large | narrow | high | B | LI |
| *Crotalus cerberus* | 50106 | 50106 | USNM | EN | IUCN | small | broad | high | E | LI |
| *Crotalus culminatus* | 158279 | 169057 | CEAM | LC | TS | large | narrow | high | B | LI |
| *Crotalus durissus* | 13009237 | 14783170 | CISA | LC | IUCN | large | narrow | high | B | LI |
| *Crotalus enyo* | 83080 | 126661 | USNM | LC | IUCN | large | broad | high | A | NR |
| *Crotalus ericsmithi* | 1178 | 1178 | CEAM | DD | TS | small | narrow |  |  |  |
| *Crotalus estebanensis* | 40 | 39.8 | ISLA | VU | IUCN | small | narrow | high | F | HI |
| *Crotalus horridus* | 2627574 | 2748686 | USNM | LC | IUCN | large | narrow | high | B | LI |
| *Crotalus intermedius* | 82720 | 132153 | CEAM | VU | IUCN | small | narrow | low | H | RT |
| *Crotalus lannomi* | 1534 | 1534 | CEAM | LC | TS | small | narrow | high | F | HI |
| *Crotalus lepidus* | 1033516 | 1033516 | USNM | LC | IUCN | large | broad | high | A | NR |
| *Crotalus lorenzoensis* | 33 | 33 | ISLA | EN | IUCN | small | narrow | high | F | HI |
| *Crotalus mitchelii* | 451111 | 697888 | USNM | LC | IUCN | large | broad | high | A | NR |
| *Crotalus molossus* | 1243119 | 1258241 | USNM | LC | IUCN | large | broad | high | A | NR |
| *Crotalus muertensis* | 1 | 1.3 | ISLA | VU | SIS | small | narrow | low | H | RT |
| *Crotalus oreganus* | 431723 | 646354 | USNM | LC | IUCN | large | broad | high | A | NR |
| *Crotalus ornatus* | 167138 | 167138 | USNM | LC | TS | large | narrow | high | B | LI |
| *Crotalus polystictus* | 122800 | 122800 | CEAM | LC | IUCN | large | broad | high | A | NR |
| *Crotalus pricei* | 353472 | 596402 | CEAM | LC | IUCN | large | narrow | high | B | LI |
| *Crotalus pussillus* | 8833 | 8832.5 | CEAM | LC | TS | large | narrow | high | B | LI |
| *Crotalus pyrrhus* | 293217 | 293217 | USNM | EN | SIS | small | broad | high | E | LI |
| *Crotalus ravus* | 56585 | 102222 | CEAM | VU | TS | small | broad | low | G | HI |
| *Crotalus ruber* | 167595 | 305120 | USNM | LC | IUCN | large | broad | high | A | NR |
| *Crotalus scutulatus* | 1232007 | 1679332 | USNM | LC | IUCN | large | broad | high | A | NR |
| *Crotalus simus* | 109609 | 164863 | CEAM | LC | IUCN | large | narrow | high | B | LI |
| *Crotalus stejnegeri* | 7964 | 7964 | CEAM | LC | SIS | small | narrow | low | H | RT |
| *Crotalus stephensi* | 76741 | 76741 | USNM | NT | TS | small | narrow | high | F | HI |
| *Crotalus tancitarensis* | 158 | 158 | CEAM | NT | TS | small | narrow | high | F | HI |
| *Crotalus tigris* | 205812 | 205812 | USNM | LC | IUCN | large | broad | high | A | NR |
| *Crotalus tlaloci* | 4060 | 4059.5 | CEAM | EN | IUCN | small | narrow | high | F | HI |
| *Crotalus tortugensis* | 11 | 11.4 | ISLA | LC | TS | small | narrow | high | F | HI |
| *Crotalus totonacus* | 101218 | 153442 | CEAM | LC | SIS | large | narrow | high | B | LI |
| *Crotalus transversus* | 1989 | 1989 | CEAM | LC | IUCN | small | narrow | low | H | RT |
| *Crotalus triseriatus* | 32895 | 32895.2 | CEAM | LC | IUCN | small | narrow | high | F | HI |
| *Crotalus tzabcan* | 150399 | 150399 | CEAM | LC | IUCN | large | narrow | high | B | LI |
| *Crotalus unicolor* | 97 | 96.5 | ISLA | LC | IUCN | small | narrow | high | F | HI |
| *Crotalus viridis* | 3808369 | 3383938 | USNM | LC | IUCN | large | broad | high | A | NR |
| *Crotalus willardi* | 214797 | 214797 | USNM | LC | IUCN | large | broad | high | A | NR |
| *Lachesis acrochorda* | 285224 | 398260 | TRSA | LC | SIS | large | narrow | low | D | HI |
| *Lachesis melanocephala* | 7060 | 9897 | CEAM | LC | TS | small | narrow | high | F | HI |
| *Lachesis muta* | 8002896 | 10928712 | CISA | LC | TS | large | narrow | low | D | HI |
| *Lachesis stenophrys* | 47908 | 108181 | CEAM | LC | IUCN | small | narrow | high | F | HI |
| *Mixcoatlus barbouri* | 2947 | 2947 | CEAM | LC | BRZ | small | narrow | high | F | HI |
| *Mixcoatlus browni* | 11208 | 11208 | CEAM | VU | SIS | small | narrow | low | H | RT |
| *Mixcoatlus melanurus* | 5511 | 5511 | CEAM | LC | TS | small | broad | high | E | LI |
| *Ophryacus undulatus* | 31569 | 116154 | CEAM | LC | IUCN | small | narrow | high | F | HI |
| *Porthidium arcosae* | 2119 | 3197 | CEAM | NT | SIS | small | narrow | low | H | RT |
| *Porthidium dunni* | 39030 | 68006 | CEAM | LC | IUCN | small | narrow |  |  |  |
| *Porthidium hespere* | 2739 | 7392 | CEAM | DD | IUCN | small | narrow |  |  |  |
| *Porthidium lansbergii* | 138952 | 383081 | CEAM | LC | SIS | large | narrow | high | B | LI |
| *Porthidium nasutum* | 402006 | 1419242 | CEAM | LC | IUCN | large | narrow | high | B | LI |
| *Porthidium ophryomegas* | 166828 | 325989 | CEAM | LC | IUCN | large | narrow | high | B | LI |
| *Porthidium porrasi* | 2779 | 2779 | CEAM | VU | IUCN | small | narrow | high | F | HI |
| *Porthidium volcanicum* | 214 | 214 | CEAM | LC | IUCN | small | narrow | high | F | HI |
| *Porthidium yucatanicum* | 40790 | 50436 | CEAM | LC | SIS | small | narrow | high | F | HI |
| *Sistrurus catenatus* | 2359709 | 3254225 | CISA | LC | IUCN | large | narrow | high | B | LI |
| *Sistrurus miliarius* | 1513634 | 2665491 | USNM | LC | IUCN | large | broad | high | A | NR |

**Table S5.** - Body size (maximum length, in milimeters) and absolute latitude used in the analysis for predicting rarity. The column “References” refers to the data on maximum length.

|  |  |  |  |
| --- | --- | --- | --- |
| **Species** | **Max. Length** | **Abs. Latitude** | **References** |
| *Agkistrodon bilineatus* | 1380 | 26.87 | Hampton, 2011 |
| *Agkistrodon contortrix* | 1000 | 30.81 | Hampton, 2011 |
| *Agkistrodon howardgloydi* | 960 | 13.26 | Conant, 1984 |
| *Agkistrodon piscivorus* | 1540 | 29.46 | Hampton, 2011 |
| *Agkistrodon russeolus* | 1050 | 19.21 | Goyd and Connant, 1990 |
| *Agkistrodon taylori* | 960 | 25.66 | Hampton, 2011 |
| *Atropoides indomitus* | 573 | 15.20 | Smith and Ferrari-Castro, 2008 |
| *Atropoides mexicanus* | 979 | 17.55 | Campbell and Lamar, 2004 |
| *Atropoides nummifer* | 721 | 21.19 | Jadin et al., 2010 |
| *Atropoides occiduus* | 795 | 15.60 | Hampton, 2011 |
| *Atropoides olmec* | 770 | 18.57 | Péreza-Higareda et al., 1985 |
| *Atropoides picadoi* | 1200 | 10.11 | Hampton, 2011 |
| *Bothriechis aurifer* | 1000 | 15.37 | Hampton, 2011 |
| *Bothriechis bicolor* | 1000 | 15.32 | Hampton, 2011 |
| *Bothriechis guifarroi* | 734 | 15.70 | Townsend et al., 2013 |
| *Bothriechis lateralis* | 1000 | 10.70 | Hampton, 2011 |
| *Bothriechis marchi* | 968 | 14.97 | Hampton, 2011 |
| *Bothriechis nigroviridis* | 937 | 10.31 | Savage, 2002 |
| *Bothriechis rowleyi* | 973 | 16.43 | Hampton, 2011 |
| *Bothriechis schlegelii* | 979 | 15.47 | Campbell and Lamar, 2004 |
| *Bothriechis supraciliaris* | 800 | 9.37 | Hampton, 2011 |
| *Bothriechis thalassinus* | 967 | 15.08 | Hampton, 2011 |
| *Bothrocophias andianus* | 973 | 12.84 | Harvey et al., 2005 |
| *Bothrocophias campbelli* | 1230 | 4.12 | Arteaga et al., 2013 |
| *Bothrocophias colombianus* | 1360 | 2.24 | Hampton, 2011 |
| *Bothrocophias hyoprora* | 830 | 3.00 | Campbell and Lamar, 2004 |
| *Bothrocophias microphthalmus* | 1162 | 4.10 | Hampton, 2011 |
| *Bothrocophias myersi* | 1200 | 3.69 | Campbell and Lamar, 2004 |
| *Bothrops alcatraz* | 505 | 24.10 | Hampton, 2011 |
| *Bothrops alternatus* | 1490 | 26.78 | Giraudo et al., 2008 |
| *Bothrops ammodytoides* | 1000 | 39.05 | Campbell and Lamar, 2004 |
| *Bothrops asper* | 2500 | 22.52 | Campbell and Lamar, 2004 |
| *Bothrops atrox* | 1541 | 4.02 | Harvey et al., 2005 |
| *Bothrops ayerbei* | 1300 |  | Folleco-Fernandes, 2010 |
| *Bothrops barnetti* | 1400 | 4.65 | Campbell and Lamar, 2004 |
| *Bothrops bilineatus* | 1230 | 2.32 | Campbell and Lamar, 2004 |
| *Bothrops brazili* | 1493 | 4.47 | Campbell and Lamar, 2004 |
| *Bothrops caribbaeus* | 2130 | 14.01 | Campbell and Lamar, 2004 |
| *Bothrops chloromelas* | 1000 | 5.22 | Hampton, 2011 |
| *Bothrops cotiara* | 1008 | 27.02 | M. Martins, unpublished data |
| *Bothrops diporus* | 1240 | 38.56 | Giraudo et al., 2008 |
| *Bothrops erythromelas* | 850 | 12.15 | Campbell and Lamar, 2004 |
| *Bothrops fonsecai* | 1079 | 22.20 | Campbell and Lamar, 2004 |
| *Bothrops insularis* | 1180 | 24.48 | Campbell and Lamar, 2004 |
| *Bothrops itapetiningae* | 673 | 22.54 | M. Martins, unpublished data |
| *Bothrops jararaca* | 1600 | 27.37 | Hampton, 2011 |
| *Bothrops jararacussu* | 2200 | 22.53 | Hampton, 2011 |
| *Bothrops jonathani* | 881 | 17.40 | Harvey et al., 2005 |
| *Bothrops lanceolatus* | 2000 | 14.74 | Hampton, 2011 |
| *Bothrops leucurus* | 1950 | 13.05 | Campbell and Lamar, 2004 |
| *Bothrops lojanus* | 610 | 3.99 | Campbell and Lamar, 2004 |
| *Bothrops lutzi* | 800 | 15.71 | Campbell and Lamar, 2004 |
| *Bothrops marajoensis* | 1500 | 0.30 | McCranie, 1993 |
| *Bothrops marmoratus* | 800 | 16.81 | Silva and Rodrigues, 2008 |
| *Bothrops matogrossensis* | 1300 | 13.99 | Campbell and Lamar, 2004 |
| *Bothrops medusa* | 800 | 10.31 | Hampton, 2011 |
| *Bothrops moojeni* | 2000 | 8.75 | Hampton, 2011 |
| *Bothrops muriciensis* | 884 |  | Campbell and Lamar, 2004 |
| *Bothrops neuwiedi* | 1000 | 14.08 | Hampton, 2011 |
| *Bothrops oligolepis* | 986 | 10.58 | Hampton, 2011 |
| *Bothrops osbornei* | 1400 | 0.08 | Hampton, 2011 |
| *Bothrops otavioi* | 793 |  | Barbo et al., 2012 |
| *Bothrops pauloensis* | 938 | 22.10 | Valdujo et al., 2002 |
| *Bothrops pictus* | 600 | 5.47 | Hampton, 2011 |
| *Bothrops pirajai* | 1370 | 13.12 | Campbell and Lamar, 2004 |
| *Bothrops pubescens* | 1200 | 34.10 | Hampton, 2011 |
| *Bothrops pulchra* | 764 | 1.99 | Hampton, 2011 |
| *Bothrops punctatus* | 1300 | 0.25 | Hampton, 2011 |
| *Bothrops rhombeatus* | 1300 |  | Folleco-Fernandes, 2010 |
| *Bothrops sanctaecrucis* | 1303 | 16.44 | Harvey et al., 2005 |
| *Bothrops taeniatus* | 1750 | 4.00 | Campbell and Lamar, 2004 |
| *Bothrops venezuelensis* | 1667 | 4.86 | Hampton, 2011 |
| *Cerrophidion godmani* | 822 | 16.72 | McCraine, 2011 |
| *Cerrophidion petlalcalensis* | 467 | 18.78 | Hampton, 2011 |
| *Cerrophidion sasai* | 713 | 10.27 | Jadin et al., 2012 |
| *Cerrophidion tzotzilorum* | 490 | 16.76 | Hampton, 2011 |
| *Cerrphidion wilsoni* | 648 | 14.34 | Jadin et al., 2012 |
| *Crotalus adamanteus* | 2590 | 30.48 | Ernst and Ernst, 2012 |
| *Crotalus angelensis* | 1410 |  | Ernst and Ernst, 2012 |
| *Crotalus aquilus* | 678 | 20.12 | Hampton, 2011 |
| *Crotalus armstrongi* | 484 | 20.32 | Campbell, 1978 |
| *Crotalus atrox* | 2337 | 34.99 | Ernst and Ernst, 2012 |
| *Crotalus basiliscus* | 2045 | 26.79 | Klauber, 1972 |
| *Crotalus caliginis* | 674 |  | Klauber, 1972 |
| *Crotalus campbelli* | 569 | 20.37 | R. Bryson, pers. comm. on 7 January, 2018 |
| *Crotalus catalinensis* | 828 | 25.64 | Martins et al., 2008 |
| *Crotalus cerastes* | 824 | 37.64 | Hampton, 2011 |
| *Crotalus cerberus* | 1050 | 34.97 | Ernst and Ernst, 2012 |
| *Crotalus culminatus* | 1680 | 19.28 | Klauber, 1972 |
| *Crotalus durissus* | 1800 | 10.45 | McCranie, 1993 |
| *Crotalus enyo* | 898 | 30.70 | Hampton, 2011 |
| *Crotalus ericsmithi* | 540 |  | Campbell and Flores-Villela, 2008 |
| *Crotalus estebanensis* | 982 |  | Klauber, 1972 |
| *Crotalus horridus* | 1892 | 32.89 | Hampton, 2011 |
| *Crotalus intermedius* | 570 | 17.55 | Hampton, 2011 |
| *Crotalus lannomi* | 638 | 19.62 | Hampton, 2011 |
| *Crotalus lepidus* | 828 | 28.11 | Hampton, 2011 |
| *Crotalus lorenzoensis* | 872 |  | Ernst and Ernst, 2012 |
| *Crotalus mitchelii* | 1370 | 27.39 | Ernst and Ernst, 2012 |
| *Crotalus molossus* | 1330 | 32.65 | Hampton, 2011 |
| *Crotalus muertensis* | 640 |  | Ernst and Ernst, 2012 |
| *Crotalus oreganus* | 1650 | 40.48 | Ernst and Ernst, 2012 |
| *Crotalus ornatus* | 1300 | 32.92 | Anderson and Greenbaum, 2012 |
| *Crotalus polystictus* | 930 | 20.23 | Klauber, 1972 |
| *Crotalus pricei* | 660 | 25.89 | Hampton, 2011 |
| *Crotalus pyrrhus* | 1320 | 35.44 | Ernst and Ernst, 2012 |
| *Crotalus pussillus* | 682 | 19.48 | Hampton, 2011 |
| *Crotalus ravus* | 700 | 17.53 | Hampton, 2011 |
| *Crotalus ruber* | 1625 | 33.85 | Klauber, 1972 |
| *Crotalus scutulatus* | 1373 | 34.78 | Hampton, 2011 |
| *Crotalus simus* | 1800 | 14.21 | Campbell and Lamar, 2004 |
| *Crotalus stejnegeri* | 724 | 23.94 | Hampton, 2011 |
| *Crotalus stephensi* | 943 | 38.47 | Ernst and Ernst, 2012 |
| *Crotalus tancitarensis* | 436 | 19.37 | Alvarado-Díaz et al., 2007 |
| *Crotalus tigris* | 885 | 32.18 | Hampton, 2011 |
| *Crotalus tlaloci* | 521 | 19.70 | R. Bryson, pers. comm. on 7 January, 2018 |
| *Crotalus tortugensis* | 1058 | 27.44 | Ernst and Ernst, 2012 |
| *Crotalus totonacus* | 1665 | 25.60 | Ernst and Ernst, 2012 |
| *Crotalus transversus* | 465 | 19.55 | Hampton, 2011 |
| *Crotalus triseriatus* | 683 | 19.67 | Hampton, 2011 |
| *Crotalus tzabcan* | 1750 | 17.28 | McCranie, 1993 |
| *Crotalus unicolor* | 955 |  | Gloyd, 1936 |
| *Crotalus viridis* | 1515 | 35.00 | Hampton, 2011 |
| *Crotalus willardi* | 670 | 31.70 | Ernst and Ernst, 2012 |
| *Lachesis acrochorda* | 3000 | 4.78 | Hampton, 2011 |
| *Lachesis melanocephala* | 2400 | 9.66 | Hampton, 2011 |
| *Lachesis muta* | 3600 | 3.45 | Hampton, 2011 |
| *Lachesis stenophrys* | 3600 | 12.05 | Solórzano, 2004 |
| *Mixcoatlus barbouri* | 510 | 17.83 | Hampton, 2011 |
| *Mixcoatlus browni* | 480 | 17.38 | Jadin et al., 2011 |
| *Mixcoatlus melanurus* | 578 | 19.10 | Hampton, 2011 |
| *Ophryacus undulatus* | 700 | 17.48 | Hampton, 2011 |
| *Porthidium arcosae* | 635 | 1.59 | Hampton, 2011 |
| *Porthidium dunni* | 570 | 17.68 | Campbell and Lamar, 2004 |
| *Porthidium hespere* | 579 | 19.03 | Campbell, 1976 |
| *Porthidium lansbergii* | 900 | 9.08 | Hampton, 2011 |
| *Porthidium nasutum* | 650 | 17.18 | Solórzano, 2004 |
| *Porthidium ophryomegas* | 800 | 14.33 | Solórzano, 2004 |
| *Porthidium porrasi* | 700 | 8.62 | Hampton, 2011 |
| *Porthidium volcanicum* | 600 |  | Solórzano, 2004 |
| *Porthidium yucatanicum* | 598 | 20.01 | Campbell and Lamar, 2004 |
| *Sistrurus catenatus* | 1003 | 31.46 | Hampton, 2011 |
| *Sistrurus miliarius* | 788 | 35.10 | Hampton, 2011 |

References cited in Table S5

Alvarado-Díaz, J., Estrada-Virgen, A., Suazo-Ortuño, I., 2007. Natural history notes on *Crotalus tacitarensis* (Serpentes:Viperidae). Herpetological Review, 38(2), 155-157.

Anderson, C.G., Greenbaum, E., 2012. Phylogeography of northern populations of Black-tailed rattlesnakes (*Crotalus molossus* Baird and Girard, 1853), with the revalidation of *Crotalus ornatus* Haloween,1854

Arteaga, A.F., Bustamante-Enríquez, L.M., Guayasamin, J.M., 2013. The amphibians and reptiles of Mindo. Quito, Universidad Tecnológica Indoamérica.

Barbo, F. E., F. G. Grazziotin, I. Sazima, M. Martins & R. J. Sawaya. 2012. A new and threatened insular species of lancehead from southeastern Brazil. Herpetologica 68:418-429.

Campbell, J. A. 1976. A new terrestrial pit viper of the genus *Bothrops* (Reptilia, Serpentes, Crotalinae) from western Mexico. Journal of Herpetology, 10(3):151-160.

Campbell, J.A., 1978. A new rattlesnake (Reptilia, Serpentes, Viperidae) from Jalisco, Mexico. Transactions of the Kansas Academy of Science, 81(4), 365-369.

Campbell, J.A., Lamar, W.W., 2004. The venomous reptiles of the Western Hemisphere. 1 Volvs. Cornell University Press, 2004.

Campbell, J.A., Flores-Villela, O., 2008. A new long-tailed rattlesnake (Viperidae) from Guerrero, Mexico. Herpetolgica, 64(2), 246-257.

Conant, R. 1984. A new subspecies of the pit viper *Agkistrodon bilineatus* Reptilia Viperidae from Central America. Proceedings of the Biological Society of Washington, 97, 135-141.

Ernst, C.H., Ernst, E.M., 2012. Venomous reptiles of the United States, Canada, and Northern Mexico. 2 Vols. The Johns Hopkins University Press

Folleco-Fernandes, A. J., 2010. Taxonomía del complejo *Bothrops asper* (Serpentes: Viperidae) en el sudoeste de Colombia. Revalidación de la especie *Bothrops rhombeatus* (García 1896) y descripción de una nueva especie. Revista Novedades Colombianas, 10(1), 33-70.

Giraudo, A.R., Arzamendia, V., Lopez, S.M., Quaini, R.O., Prieto, Y., Leiva, L.A., Regner, S.A., Urban, J.M., 2008. Serpientes venenosas de Santa Fe, Argentina: conocimientos obre su historia natural aplicados para la prevención de ofidismo. FABICIB, 12, 69-89.

Gloyd, H.K., 1936. The status of *Crotalus unicolor* Van Lidth de Jeude and *Crotalus pulvis* Ditmars. Herpetologica, 1(2), 65-68.

Goyd, H.K., Conant, R., 1989. Snakes of the *Agkistrodon* complex. A monographic review. Contributions to Herpetology, Number 6. K. Adler. Soc. Stud. Amphib. Rept., Ithaca, New Y

Hampton, P. M. 2011. Ventral and sub-caudal scale counts are associated with macrohabitat use and tail specialization in viperid snakes. Evolutionary Ecology, 25, 531-546

Harvey, M.B., Aparicio, E.J., Gonzales, A.L., 2005. Revision of the venomous snakes of Bolivia. II: The pitvipers (Serpentes: Viperidae). Annals of Carnegie Museum, 74(1): 1-37.

Jadin, R.C., Gutberlet Jr. R.L., Smith, E.R., 2010. Phylogeny, evolutionary morphology, and hemipenis descriptions of the middle american jumping pitvipers (Serpentes: Crotalinae: Atropoides). Journal of Zoological systematics and Evolutionary Research, 48(4), 360-365.

Jadin, R.C., Townsend, J.H., Castoe, T.A., Campbell, J A., 2012. Cryptic diversity in disjunct populations of Middle American Montane Pitivipers: a systematic reassessment of *Cerrophidion godmani*. Zoologica Scripta, 41(5), 455-470.

Jadin, R.C., Smith, E.N., Campbell, J.A., 2011. Unravelling a tangle of Mexican serpents: a systematic revision of highland pitvipers. Zoological Journal of the Linnean Society, 163, 943-958.

Klauber, L.M., 1972 Rattlesnakes: Their Habits, Life Histories, and Influence on Mankind. 2 Vols, 2aed. University of California Press.

Martins, M; G. Arnaud; R. Murillo-Quero. 2008 Exploring hypotheses about the loss of the rattle in Rattlesnakes: How arboreal is the is the Isla Santa Catalina Rattleless Rattlesnake, *Crotalus catalinensis*? South American Journal of Herpetology, V. 3, N. 2: 162-167.

McCranie, J.R., 1993. Crotalus durissus Linnaeus Neotropical Rattlesnake. Catalogue of American Amphibians and Reptiles, 577, 1-11.

McCranie, J.R., 2011. The Snakes of Honduras: Systematics, Distribution, and Conservation. Society for the study of amphibians and reptiles.

Péreza-Higareda, G., H. M. Smith, and J. Jullá-Zertuche. 1985. A new jumping viper, *Porthidium olmec*, from southen Veracruz, México (Serpentes: Viperidae). Bulletln Maryland Herpetologlcal Soclety, 21(3), 97-106.

Savage, J.M., 2002. The amphibians and reptiles of Costa Rica: a herpetofauna between two continents, between two seas. University of Chicago press.

Silva, V.X. and Rodrigues, M.T., 2008. Taxonomic revision of the *Bothrops neuwiedi* complex (Serpentes, Viperidae) with description of a new species. Phyllomedusa, 7(1), 45-90.

Smith, E.N., Ferrari-Castro, J.A., 2008. A new species of jumping pitviper of the genus *Atropoides* (Serpentes: Viperidae: Crotalinae) from the Sierra de Botaderos nad the Sierra la Muralla, Honduras. Zootaxa, 1948, 57-68.

Solórzano, A.L., 2004. Snakes of Costa Rica: Distribution, taxonomy, and natural history. Instituto Nacional de Biodiversidad (INBio).

Townsend, J.H., Medina-Flores, M., Wilson, L.D., Jadin, R.C., Austin, J.D., 2013. A relict lineage and new species of green palm-pitviper (Squamata, Viperidae, *Bothriechis*) from the Chortís Highlands of Mesoamerica. ZooKeys, 298(77).

Valdujo, P. H.; C. Nogueira; M. Martins. 2002. Ecology of *Bothrops neuwiedi pauloensis* (Serpentes: Viperidae: Crotalinae) in the Brazilian Cerrado. Journal of Herpetology, V. 36, N. 2: 169-176.

**Table S6.** - Parameter estimates of Bayesian phylogenetic mixed models analyses. An asterisk indicates a statistically significant result (*p* < 0.01). CI = confidence intervals.

|  |  |  |  |
| --- | --- | --- | --- |
| **Parameter** | **Posterior Mean** | **Lower CI (95%)** | **Upper CI (95%)** |
| Intercept | 0.976 | −2.574 | 4.299 |
| Maximum body size | 0.001 | −0.000 | 0.004 |
| Intercept | 0.365 | −0.588 | 1.400 |
| Latitude\* | 0.101 | 0.052 | 0.172 |