- A) Inclusion of the following species of the Genus *Abronia* into Appendix I: *Abronia anzuetoi, A. campbelli, A. fimbriata, A. frosti* and *A. meledona*
- B) Inclusion of the following species of the Genus *Abronia* into Appendix II: *Abronia aurita, A. gaiophantasma, A. montecristoi, A. salvadorensis* and *A. vasconcelosii*

An annotation is also proposed:

- a) for zero quota for wild specimens, and
- b) zero quota for captive bred specimens from non-range Sates. This annotation would allow for captive-bred exports from range States

Proponent: Guatemala

Summary: The genus *Abronia*, known as alligator lizards or abronias, are medium-sized insectivorous arboreal lizards from Mexico (MX) and northern Central America (El Salvador (SV), Guatemala (GT), and Honduras (HN). They mainly inhabit montane cloud forests where they are associated with epiphytes in the canopy of tall mature oak or pine trees. They give birth to between one and twelve live young once a year.

This proposal considers ten species that are found in Guatemala, El Salvador and Honduras. A second proposal at CoP17 submitted by Mexico and the European Union proposes the inclusion of all species of *Abronia* in Appendix II. See analysis of CoP17 Proposal 26 for a discussion of the genus as a whole.

Inclusion in Appendix I

Abronia anzuetoi (GT): Only known from one patch of forest with an area of 24km² ¹. No information on population size or trends. No major threats known. Reported in pet trade in China and Switzerland (see CoP17 Proposal 26). Classified in the IUCN Red List as Vulnerable (2014).

Abronia campbelli (GT): Only known from one patch of forest with an area of 18km² and an estimated population of 500 individuals². There is ongoing habitat loss and degradation from cattle ranching. In 2010, 47 individuals were confiscated from an illegal pet market in Mexico³. Known illegal trader has asked locals about this species within its native range⁴. Classified in the IUCN Red List as Critically Endangered (2013).

Abronia fimbriata (GT): Known from four locations with an extent of occurrence of around 1500km². No data on population status or trends. There is continuing decline in the extent and quality of its habitat due to conversion to agriculture, and collection of ornamental plants⁵. There is evidence online of international trade for the pet market. Classified in the IUCN Red List as Endangered (2014).

Abronia frosti (GT): Only known from a few specimens at one location which is a patch of forest 0.7km² in area. No information on population size or trends. It is reported to be subject to continuing decline in the extent and quality of its habitat due to logging for firewood. A trader has asked locals about this species within its native range⁴. Classified in the IUCN Red List as Critically Endangered (2013).

Abronia meledona (GT): Limited to one area with an extent of occurrence of less than 900km². No information on population size or trends. It is subject to continuing decline in the extent and quality of its habitat due to agricultural activities. A known illegal trader has asked locals about this species within its native range⁴. Classified in the IUCN Red List as Endangered (2013).

Inclusion in Appendix II with a zero quota for wild specimens and a zero quota for captive-bred exports from non-range States

Abronia aurita (GT): Only known from one locality with an extent of occurrence of approximately 400km². No information on population status or trends. The forest where it is found is reportedly heavily fragmented and degraded. Three specimens of this species were seized in 2009 hidden in video cassette in UK, on route from Guatemala to Czech Republic⁶. Classified in the IUCN Red List as Endangered (2013).

Abronia gaiophantasma (GT): Known from fewer than five locations with an extent of occurrence of approximately 750km². Described as uncommon, population trend unknown. Reported to be affected by

habitat loss. Evidence online of international trade of this species. Classified in the IUCN Red List as Endangered (2014).

Abronia montecristoi (SV, HN, GT): Known from two locations of intact forest, with an extent of occurrence of approximately 800km². Not recorded recently, despite the area where it occurs being well surveyed for reptiles⁷. There is ongoing destruction of old growth forest where it is found in Honduras; habitat in El Salvador is reportedly better preserved⁸. Classified in the IUCN Red List as Endangered (2013).

Abronia salvadorensis (HN): Only known from a few specimens. Recorded from two locations with an extent of occurrence of up to 200km². Likely to be affected by habitat loss and degradation. Classified in the IUCN Red List as Endangered (2013).

Abronia vasconcelosii (GT): Known from 10 localities with an extent of occurrence of about 2500km². Previously described as common, the population is thought to be in decline as much of the land has been converted to agriculture since the 1990s. Reported trade of this species in Czech Republic and United Kingdom and advertised for sale online. Classified in the IUCN Red List as Vulnerable (2013).

Abronia species are in trade for the exotic pet market. This trade is reviewed in the analysis of Proposal 26. The great majority of recorded trade is in the Mexican *A. graminea* and most of the remainder in unspecified *Abronia* spp⁹. Trade data records a small number of specimens imported with origin Guatemala, all for scientific purposes⁹.

There is no authorised collection for trade or commercial export of *Abronia* species native to El Salvador, Honduras and Guatemala. However there is reported commercial trade or evidence online of the sale of *A. anzuetoi, A. campbelli, A. fimbriata, A. aurita, A. gaiophantasma* and *A. vasconcelosii.*

The range of all of these species overlaps with protected areas, although often only partially. There are ongoing monitoring programmes in Guatemala, plus local education and awareness programmes. A captive breeding program has begun for *A. campbelli*, *A. frosti* and *A. meledona* with some successful re-releases. In Mexico there is at present captive-breeding in government Wildlife Management Units (UMAs) of *A. campbelli* as well as a number of Mexican species; a private initiative in Mexico is also captive-breeding *A. vasconcelosii*.

Analysis:

Inclusion of Abronia anzuetoi, A. campbelli, A. fimbriata, A. frosti and A. meledona in Appendix I

Available information indicates that *Abronia anzuetoi*, *A. campbelli*, and *A. frosti* all have small or very small ranges in which there is said to be ongoing habitat degradation. These appear to meet the biological criteria for inclusion in Appendix I in *Res. Conf. 9.24 (Rev. CoP16)*.

Abronia fimbriata and A. meledona have more extensive distributions, although habitat in these is also believed to be declining in quality and extent. There is no information on population levels or trends, other than the inference that populations are likely to be declining. There is insufficient information to determine whether these species meet the biological criteria for inclusion in Appendix I.

There is international demand for *Abronia* species indicating that these species meet the trade criteria for inclusion in Appendix I.

Inclusion of *Abronia aurita*, *A. gaiophantasma*, *A. montecristoi*, *A. salvadorensis* and *A. vasconcelosii* in Appendix II

These species have known areas of occurrence ranging from 200km² to 2500km². There is no information on population levels or trends on any, other than an inference that population are likely to be declining owing to declines in quality and extent of habitat. There are indications of trade in three of them (*A. gaiophantasma*, *A. aurita* and *A. vasconcelosii*). However such trade (which is illegal in wild-caught specimens from range States) appears to be at a very low level and it seems unlikely that harvest for it will be reducing the species to a level at which they may qualify for inclusion in Appendix I in the near future, or at which its survival might be threatened by continued harvesting or other influences.

The proposal includes a zero quota for captive-bred specimens from non-range States. This is intended to reflect that no legal export for commercial purposes has been permitted for these species and therefore any

founding stock of commercial captive breeding facilities is believed to have been imported illegally. There is no other example of such a restriction on trade in captive-bred specimens of Appendix-II listed species in the Appendices.

There is a great deal of variation within species, and it can be difficult to distinguish between some species. Given that at least three of the species proposed here for listing in Appendix I appear to meet the criteria, then the other species meet the criteria in Annex 2 b of *Res. Conf. 9.24 (Rev. CoP16)* (lookalike).

Reviewers: D. Ariano-Sánchez, J. Campbell, W. Schmidt, J. Janssen and S. Chng.

References:

Information not referenced in the Summary section is from the Supporting Statement.

¹ Ariano-Sánchez, D., Acevedo, M. & Johnson, J. (2014) *Abronia anzuetoi*. The IUCN Red List of Threatened Species 2014.

² Ariano-Sánchez, D., & Torres-Almazán, M. (2010) Rediscovery of *Abronia campbelli* (Sauria: Anguidae) from a Pine-Oak Forest in Southeastern Guatemala: Habitat Characterization, Natural History, and Conservation Status. *Herpetological Review*. 41: 290.

³ Ariano-Sánchez, D., Johnson, J. & Acevedo, M. (2013) *Abronia campbelli*. The IUCN Red List of Threatened Species 2013

⁴ Ariano-Sánchez, D. (2016) *In litt.* to the IUCN/TRAFFIC Analyses Team, Cambridge.

⁵ Acevedo, M., Ariano-Sánchez, D. & Johnson, J. (2014) *Abronia fimbriata*. The IUCN Red List of Threatened Species 2014

⁶ Daily Mail (2009) Real-life video nasty: Customs officials discover 3 rare lizards smuggled inside cassette box. http://www.dailymail.co.uk/news/article-1233257/Real-life-video-nasty-Customs-officials-discover-3-rare-lizards-smuggled-inside-cassette-box.html. Viewed on 29th June 2016.

⁷ Campbell, J. A. & Frost, D.R. (1993) Anguid lizards of the genus *Abronia*: revisionary notes, descriptions of four new species, a phylogenetic analysis, and key. *Bulletin of the American Museum of Natural History*. 216.

⁸ Townsend, J.H. & Köhler, G. (2013) Abronia montecristoi. The IUCN Red List of Threatened Species 2013.

⁹ Analysis of US Fish & Wildlife Service Law Enforcement Management Information System (LEMIS) data, May 2016.