

## **Evaluation of the survey of the remaining stocks of *Parosphromenus* populations in the *Parosphromenus* Project and in the IGL 2024** (based on the 2/2024 census of the *Parosphromenus* Project)

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### **Preliminary remarks:**

In coordination with the *Parosphromenus* Project, which surveys the population of worldwide *Parosphromenus* friends twice a year, and our fish warden Bennie Wilden, we have inquired about and evaluated the current *Parosphromenus* population. The basis for this evaluation was the latest P-P surveys by Helene Schoubye-Johansen, which gives me (who, like many IGL *Parosphromenus* breeders, also participate in the P-P) a good overview of the populations and also of the changes outside the IGL.

I would like to thank Helene Schoubye-Johansen (DK) from *Parosphromenus*-Project, she did the essential preparatory work and had to wait a long time for me. She herself repeatedly reports significant stocks.

### **Stocks in general**

It is noticeable that international participation in the PP census was impressive and usually smaller stocks and also some offspring are reported. This is often due to current trade imports or imports from just a few months ago. Paros are sent all over the world from wholesalers in Singapore, Bangkok and Jakarta at almost the same time. Often in large numbers, even thousands, and are sold here and there at the same time. These are bought, successfully bred and reproduced at almost the same time. But crucially, groups seem to be forming in the USA, Spain and elsewhere that are jointly maintaining the Paros and are obviously exchanging information. A positive development is underway here and networking is becoming apparent (beyond simply reporting stocks, people obviously seem to be exchanging fish and experiences).

I am less able to judge what is happening in the USA or Asia in total and in what quality; it is primarily managed in the P-P and contact is being developed. The success and duration of these interest clusters are certainly very individual and fragile due to the sometimes great distances.

### **Stocks in the IGL**

The stocks are easy to see in the table. Overall, it is clear that the connection between the people in *Paro AG* and in the P-P leads to a lively exchange among the breeders: In the IGL and CIL, we (almost) all know each other personally, maintain contact and exchange animals if necessary to maintain the stock, we pull together, so to speak. Most German PPlers are active in the IGL at the same time or know the connection points.

From there, the Paros that are being sought will reach their destination; somehow and at some point, if the searcher is ambitious enough. While in the wider world the stocks depend on the frequent imports of *P. (cf.) bintan*, *gunawani* (?), *linkei*, *filamentosus*, *parvulus* and *ornaticauda* (and on accidental offspring from these over several generations) and private souvenirs (rare individual cases), the exchange and systematic preservation in the aquarium in the IGL is largely satisfactory. However, there are many different types of locations and too few breeders, and in a year everything can be different (much better or much worse).

**Origins and locations** (old explanation here again for clarification)

The following comments and suggestions for improvement:

1. When assessing the stocks and trying not to create an unnecessary number of "strains" artificially, the indication of the origin (location or previous owners) is an important indicator. I take the liberty of interpreting this information and looking at it with my insider knowledge in order to streamline the origins for future surveys. Since we currently only have wild catches (or offspring of them) of *P. tweediei* "Pontian" and *P. tweediei* "Sri Bunian", which represent two ends of a canal system, I have suggested the designation *P. tweediei* tt (for terra typica). 2. It is similar with *P. cf. harveyi* "North Selangor" = "Sungai Panjang" or Jalan Sungai Panjang. They are the same. However, I would separate them from *P. harbeyi* tt = Batu Arang, firstly because they are distinguishable from them and secondly because among the *cf. harveyi* caught in Sungai Panjang (50 km away) there were also red, different Paros (or a red color morph/perhaps hybrids). We have to be cautious here.
3. The (species) separation of the southeastern Paros from West Malaysia is still unclear: We have the well-known *Parosphromenus alfredi* "Sedili" (which has become extinct in its natural habitat and has been displaced by *nagyi* and which should be the subject of a conservation programme), and otherwise unclear forms such as *P. sp.* Endau Rompin (collected by P. Beyer) and, more recently, *P. sp.* Kayan (which may be identical to the previous one), but which was found 100 km further south. The latter was found in the 1990s by N. Neugebauer and was misidentified as "deissneri". The *cf. alfredi* "trade" and as far as I know (oral communication with Wentian Shi)

I would strictly separate *P. ? Kota Tinggi*, even those that come from the trade, and I don't trust myself to make a statement about their identity without good pictures. According to [one keeper](#), who keeps both *P. alfredi* "Sedili" and *P. ? Kota Tinggi* in parallel, they are clearly different. The *P. sp.* "Batu Pahat = Ayer Hitam", our original paro from Foersch and Schaller, is currently definitely in stock. (Origin: Peter Beyer and so far the only private import). Please do not lump them together/cross them with the *P. sp.* Batu Pahat "trade Dietzenbach 2020" (which in my opinion may not come from the same origin).

### **About the species**

*P. alfredi* "Sedili": is in good stock again, but there is currently a (supposed) inbreeding bottleneck. It is good that O. Perrin, M. Schlüter and M. Reinecke have good stocks. I cannot judge the other *cf. alfredi* (?) as I did not have them for comparison. See above. Please do not mix them under any circumstances!

*P. allani* and *P. barbarae*:

The two are extinct or almost extinct, unfortunately *barbarae* (only one owner with a weak stock) is no longer found in the wild, *P. allani* is still found in the Sibu area (although it is almost never exported).

*P. anjunganensis* -trade: most recently came through trade and is in very good stock as an "special case". This is due to the good condition of the imported fish and the fact that several dealers/importers offer them at the same time (they are probably the same exporter and have largely the same origin). Some also have offspring.

*P. bintan* "Bintan", *cf.-bintan* "blue line", "Sentang", Jambi and *P. gunawani* as well as *P. linkei*

I am summarizing the many (alleged) *gunawani*, *bintan* and *cf. bintan* from various (but unknown) origins in Sumatra and the islands of the Riau archipelago. It is striking that this group of species is present in secure stocks, as is *P. linkei*, for example, although the origins (almost always) are unknown. In addition to their undisputed beauty, this is due to the fact that in recent years *P. linkei* and *P. (cf.) bintan* have been available in various forms on the market. These are bred unintentionally or intentionally and then disappear again after a few years (unless they are re-imported in the meantime). They are lost over the time, also because people expect to be able to get them back easily. Of course, everyone should keep and breed their beautiful *P. cf. bintan* "blue-line" or similar, but in my opinion, conservation breeding should primarily focus on forms that can be traced back to trustworthy origins (e.g. those from *Bintan* or *Belitung Barat* or those from *Bangka*, assuming that the collectors could name documented locations) and keep them pure.

*P. deissneri* "trade" and several FO forms:

Has now found stable breeders and is in stock as a commercial import and from several locations, which probably go back to W. Shi's expeditions.

Helene Shoubye produced and distributed larger quantities.

*P. filamentosus* "trade":

Is in a few good hands and a zoo is involved in conservation breeding

*P. harveyi* "Batu Arang" and "Sungai Panjang":

The actual *P. harveyi* "Batu Arang" that I was able to bring back from terra typica at the beginning of 2020 are unfortunately extinct. As far as I interpret his report correctly, O. Perrin brought some back. The *P. harveyi* "Sungai Panjang" and "Nordselangor" (which are probably the same) that occur parallel to the red *P. sp.* "Tanjung Malim" are quite well in stock. The red ones are no longer there. One problem is the indistinguishability of the females, so if red male juveniles appear in your *P. harveyi* "Sungai Panjang", we know that there are (after all) hybrids.

*P. julinae* :

Was spread by Wentian Shi and the F1 was successful. At the end of 2023 and again in 2024, *P. julinae* was imported twice by Aquarium Dietzenbach and also bred by some breeders. Currently safely in stock.

*P. kishi*:

Is a clearly good species, was distributed by the co-describer Wentian Shi and has probably died out here. We are curious to see whether it will appear again in the next census. What a pity.

*P. nagyi* "trade", "Kuantan", "Pekan-Nenasi", "Cherating" and "Sedili"

Came via trade and is still stable in several location variants from our trips in 2004, 2009 and 2017. *P. nagyi* seems to be an "aquarium fish".

*P. opallios* "trade", only from a few keepers/breeders

*P. ornaticauda* "trade", *P. parvulus* "trade"

all came via trade several times in recent years, are very beautiful and are kept with a certain amount of ambition. However, the population is not "strong", but the trade has supplied new

specimens every now and then in recent years. Apparently no one has ever been to the locations (or for decades) to catch/bring any.

*P. paludicola* "trade":

Our souvenirs (2017) from location Lata Belatan and previous ones (2004 and 2009) from Paka are obviously gone. Nevertheless, the stock of *P. paludicola* from trade is good due to repeated imports by Glaser in recent years.

*P. pahuensis*:

The stock was very critically low. At the end of 2023 and again in 2024, *P. pahuensis* was imported by Aquarium Dietzenbach and also bred by some breeders. Currently safely in stock. For me, the animals are indistinguishable from the ones we had before around 2010.

*P. phoenicurus* "Langgam", "Sungai Pagar" and others. After the species description by Schindler & Linke we had the idea that *P. phoenicurus* was a type very similar to *P. tweediei*, but from Sumatra and had only red fin bands and a lanceolate caudal marking, but we are now proven wrong. Various private imports (Sungai Pagar by Ronny Kyller) and commercial ones from the huge Sungai Ka(e)mpar drainage system show that the variance can be considerable. In October 2023, alleged *P. phoenicurus* "Langgam" arrived at Dietzenbach, but they had almost starved to death. I looked at them and secured some specimens. They were large, slender, red-banded and had transparent (turquoise in life) accompanying bands. The fish from 10/23 are more like the *P. cf. phoenicurus* trade-Dietzenbach 2014 than the only-red "Langgam". Since some arrived at Dietzenbach under the label "Langgam" in the meantime, which looked completely different, one can only pray that they are not thrown together. The ones from 2024 are something completely different or the natural variance must be very large.

*P. sp.* "Endau Rompin" possibly identical to *P. sp.* "Kahang"

Only a few owners report them, and they go back to two locations and origins: private imports by P. Beyer, O. Perrin and W. Shi.

*P. sp.* "Ampah"

Nobody reports a stock. I know of at least one breeder who still has a small stock (which has not been reported). The current stock (going back to Shi) and the one from Glaser's import in 2011 are apparently (almost) gone. Urgent action is needed.

*P. quindecim* "trade/ ManisMata"

All fish in the hobby go back to two imports in quick succession in 2001 by Aquarium Glaser (called *P. sp.* "Manis Mata") and the distribution of the offspring of these animals by Bussler and Hallmann. For all these years we had comparatively large stocks of this simple and extremely colorful Paros and recently they had almost died out. The call for conservation breeding has led to several offspring and a secure stock. Good!

### **Evaluation of the stocks and qualities:**

Regardless of the fact that aquarium keeping should primarily be fun and one rely on the trade and others or faces the loss in a relaxed manner, there are individuals who breed with enthusiasm and enjoy it.

About (only!) every 5th stock reports offspring, the rest are (mostly, not always) exchanged or acquired adults. I thank these active fellow breeders very much.

However: there are too few of us and our strength is waning overall. Overall, participation in the autumn census in the international sphere of influence of the PP is good and somewhat weak in the IGL faction.

Our "favorite" Paro is *P. linkei*, then *anjunganensis*, (cf.) *bintan*, *nagyi* and now again *P. quindecim*. The stocks of these Paros, as well as those of *parvulus* and *ornaticauda*, swell with or after the commercial imports, they are bred once or twice and also distributed. That is a "lucky belly". Then they almost disappear again in a few years and ultimately remain dependent on supplies from the trade.

If we evaluate the stocks in the medium or long term, we can see that certain species "interest" us more for various reasons and therefore remain around for longer. This is partly individual, i.e. the original fish collectors (godfathers of their own free will) make a special effort (for example *P. alfredi* "Sedili" or *P. tweediei* "Sri Bunian"). Or it is a Paro that has been rare or never seen for many years and is therefore sought after (such as *P. deissneri*) or a particularly pretty one (such as *P.ornaticauda* and *P. linkei*).

If they are constantly being sold, such as *P. bintan*, *linkei* or *parvulus*, which is all well and good for the numerical stock, it is also bad for conservation efforts because no one has any ambition to systematically breed such Paros because they would not be able to get rid of them. Paros that are particularly colorless and/or difficult to breed (such as *P. sumatranus* or *paludicola*) are often lost soon after imports.

We already knew this and it is becoming apparent again and again that we cannot maintain all local forms and species in the medium or long term through our own breeding. Actually, we should concentrate on a few species. But who wants to presume to tell others which Paros they should (preferably) keep and breed? After all, the whole thing is a hobby, not a profession!

2024 was a good year for Paro friends as far as commercial imports are concerned:

Many interesting Paros arrived in (mostly) good quality, which can be seen from the inventory list. I am curious to see how long the trade will continue (well).

When this source dries up, at the latest, we will have to optimize conservation breeding. Or expect the "disappearance" of most species from aquaristic.