

Amphibian Ark Conservation Breeding Working Group Presentation

2008 CBSG Annual Meeting, Adelaide, Australia



Amphibian Ark Conservation Breeding Program

Aligning Resources and Needs



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Overview

- Goal of **AArk** conservation breeding program
 - Start conservation breeding programs
 - with maximum number of species
 - at lowest possible cost
 - in shortest amount of time
 - with maximum probability of success



Overview

- Goal of conservation breeding organizations
 - To facilitate conservation breeding
 - at various cost levels
 - with known monetary outlays
 - relatively low risk
 - with quick, measurable success
 - with a variety of projects to choose from



Solution #1

- Since there are approximately 500 species that we estimate will go extinct without rescue,
- And, since there are approximately 500 major zoos and aquariums,
- We can simply put the species' names in a hat and everyone draws one and saves it



The major problem with this solution is that it will not work



Solution #2

- Create a decision tree that can be used to align conservation breeding priorities with conservation breeding organization's resources



The Nine Step Decision Tree

- Question #1: For a given country, has a species prioritization process been completed?



The Nine Step Decision Tree

- Question #2: Is there range state approval for initiating a conservation breeding program?



The Nine Step Decision Tree

- Question #3: Are there founders available?



The Nine Step Decision Tree

- Question #4: Do we have a suitable partner in the range state?
 - Do they have existing facilities?
 - Are they well-established and highly regarded?



The Nine Step Decision Tree

- Question #5: Is there already a relatively high level of husbandry expertise?
 - Do they have existing breeding programs?
 - Have they participated in training workshops?



The Nine Step Decision Tree

- Question #6: Do we have an outside institutional partner or consortium partner that has resources that can be utilized to advance the conservation breeding program?
 - An example of an outside consortium might be the Madagascar Fauna Group, which could invest resources with a range state partner like Parc Ivoloina in a range state breeding effort



The Nine Step Decision Tree

- Question #7: Can we effectively monitor and evaluate outcomes?
 - Can we conduct financial audits?
 - Can we regularly measure breeding success?
 - Can we be assured that funds are spent wisely and effectively?



The Nine Step Decision Tree

- Question #8 (optional): Can breeding be conducted outside of range country?



The Nine Step Decision Tree

- Question #9: Is there additional or ancillary value associated with working with a particular species or country?
 - A wealthy donor might have a specific interest in a particular country
 - A major pharmaceutical company may have a particular interest in a specific genus or species



Process

- Identify species by country
- Analyze each country's potential using nine step process
- Determine specific conservation breeding opportunities
- Estimate specific costs



Outcomes

- Allows zoos and aquariums to identify specific projects that they can participate in
- Identifies specific efforts with associated costs
- Helps to ensure that zoos and aquariums can pair up with projects that can be initiated quickly



Outcomes (Con't)

- Helps to ensure that projects will yield measurable success
- Helps mitigate risk by isolating the most low-risk efforts
- Provides a broad range of choices



Problems

- Not all critically important countries have as yet undergone prioritization
- Where they have, not all scores are comparable
- The prioritizations are based on present state of knowledge (must be update to include new discoveries and/or new threats)



Problems (Con't)

- This approach allows us to isolate the “low hanging fruit” NOT NECESSARILY the most important species – that is, it will yield the easiest critical species to work with but not always the most important species (due to the fact that not all countries have undergone the species prioritization exercise)
- We will always be faced with a “moving target” as a direct consequence



Opportunities

- We can generate well defined funding packages at a variety of funding levels
- We can identify efforts that have the greatest probability of success
- We can find areas of maximum leverage (projects that are cost effective because of economies of scale)
- Where there are strong multi-country networks we can take advantage of them

Next Steps



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Responsibilities

- The nine step process will be conducted by AArk staff



Timetable

- We anticipate that we can conduct the analysis by the mid-year meeting, 2009, in the UAE
- We would anticipate that the major stakeholders can participate in the review and initiate implementation immediately after the mid-year meeting



Conclusions

- This process holds the highest promise of connecting the need of AArk to get the maximum number of species, at the lowest possible cost, in the shortest period of time, with the highest probability of success, into conservation breeding programs, and –
- Provides the zoo and aquarium community with the broadest range of possibilities for participating in the development of assurance populations