

Hand-rearing should be avoided but has been carried out successfully in several cases. A few very practical and general comments on hand-rearing a Black rhinoceros calf are given by Eulenberger et al. (2000). The calf should be intensely taken care of in the first 5 days. The use of an low-fat artificial milk (e.g. Salvana<sup>®</sup> foal exchanger milk) proved very successful (Rhinoceros milk is very low in fat). An upper limit per feeding is suggested. Access to an unlimited portion of an electrolyte solution (e.g. Lytavit<sup>®</sup>, Albrecht) should be provided (high liquid demand, up to 25 l per day at the age of about 6 months). The weight should be controlled daily and serves as a criteria for quantity and quality (percentage of milk exchanger and lactose to ease the feeding) of the meal. Faeces as well as the general state of health should be checked continuously. Any case of bacterial imbalance of the gut should be stabilized with an initial substitution of gamma-globulines and para-immunity inducers. Furthermore, it seems advisable to give prebiotics. Antibiotics should be omitted (as far as possible).

Colostrum of the cow in the first 24 hours is surely the best start. Data of milk components are given in Göltenboth (1995). The additional supplementation of the artificial milk with vitamins and minerals is recommended (for data see Göltenboth, 1995; Eulenberger, 2000).

The calves should gain around 2 kg body mass daily in the first weeks. By the age of three months, a calf can drink up to 35 l daily (Puschmann, 1983).

There seems to be a large individual acceptance of hay, leaves, flakes, grated carrots and bananas. Bananas were taken at the age of 12-15 days. Additionally to the milk, boiled rice, flakes, hay, soft fruits, and carrots were eaten from the 4<sup>th</sup> week onwards (Puschmann, 1983). In another case the calf was trying the feed for the first time at the age of 70 days and ate on its own by the age of 4 respectively 5 months (Wallach, 1969; Eulenberger, 2000). Constipation may occur during hand-rearing. Adding fig juice to the milk may prove helpful (Wallach, 1969). The coming through of the teeth begins at the age of about 70-80 days and may cause mild fever, diarrhoea, and loss of appetite. Providing cool water to wallow may help in those situations (Wallach, 1969).

Some individuals may feel 'lonely' when separated from the mother and / or the group. The youngsters might be stressed by this. Giving the calf a companion, such as a goat or sheep has proved helpful in some cases. In other zoos, the keepers kept the calf 'busy'. Some recommend not to initiate too strong a bonding between the calf and the keeper in order to facilitate the later reintroduction to the group.