$$N_i' = N_i - N_i * m + \frac{(N_{tot} - N_i) * m}{A - 1}$$

$$f_i' = f_i - f_i * m + \frac{(1 - f_i) * m}{A - 1} = f_i (1 - m - \frac{m}{A - 1}) + \frac{m}{A - 1} = f_i (1 - \frac{A * m}{A - 1}) + \frac{m}{A - 1}$$

$$f_i' = \frac{f_i * (1 + s_i)}{\sum f_k * (1 + s_k)} = \frac{f_i * (1 + s_i)}{\sum f_k + \sum f_k s_k} = \frac{f_i * (1 + s_i)}{1 + \sum f_k s_k}$$

$$f(N) = (1 - m) * p^2 + p * q$$

$$f(S) = 0.3 * q^2 + p * q$$