The dynamics of some contest-competition population models with the effect of harvesting and stocking

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In this talk, we consider contest-competition population models of the form $x_{n+1} = x_n f(x_{n-k})$, where $k = 0, 1$ and the map $f(x)$ is decreasing on $[0, \infty)$. We investigate the dynamics under different harvesting or stocking strategies. In particular, we give some results concerning periodicity, stability, invariants and persistent sets.