

1. Record Nr.	UNINA9910983298603321
Autore	Tave Douglas
Titolo	Conservation Aquaculture : An Evolution-based Approach for the Production of Fish for Aquaculture-assisted Fisheries Programs / / by Douglas Tave
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2025
ISBN	9783031719783 3031719786
Edizione	[1st ed. 2025.]
Descrizione fisica	1 online resource (215 pages)
Disciplina	577.6 577.7
Soggetti	Freshwater ecology Marine ecology Conservation biology Ecology Vertebrates Food science Freshwater and Marine Ecology Conservation Biology Vertebrate Zoology Food Science
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Aquaculture-assisted Fisheries -- Defining Conservation Aquaculture -- Captive Conservation Genetic Management -- Domestication -- Epigenetics -- Behavior -- Conservation Aquaculture Programs.
Sommario/riassunto	Stocking hatchery-produced fish has been a standard component of fisheries management for over 100 years. This book discusses the production of hatchery fish used in aquaculture-assisted fisheries programs to help stabilize and recover endangered species. For the most part, these programs have been unsuccessful, and a reason why is that the traditional approach to fish culture produces fish that are genetically and behaviorally ill-suited to help recover an imperiled

species. The hatchery environment and management used to culture the fish makes them sub-viable in the wild. Even if most of the augmented fish die, survivors that mate with wild fish lower the fitness of the endangered population, making the conservation program counter-productive. Since traditional aquaculture programs have been shown to produce fish that are ill-suited to help recovery, a new way of producing fish is needed. That new way is conservation aquaculture. In conservation aquaculture, fish are raised in naturalized mesocosms that mimic the environment in which the endangered species lives. Management is naturalized, so domestication does not produce genetic changes, and so fish develop a full and effective suite of behaviors that enable them to forage efficiently and detect and avoid predators when stocked. The conservation aquaculture management techniques described in the book can also be used to improve commercial and recreational fish stocking programs. This book will set the blueprint for all those who are seeking to ensure their efforts in fish conservation can lead to the best possible outcomes for the fish species they strive to conserve. Nick Whiterod, Ecologist and Science Program Manager, Coorong, CLLMM Research Centre, Australia This guide should find a place on the bookshelf of any hatchery. Randall Brummett, Senior Aquaculture Specialist, World Bank.
