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Aquaponics

The Integration of Aquaculture & Hydroponics to form a self contained Eco. system

FN: Aquaponic System info Graphic 7

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Fingerlings
baby fish

Eco. System Management: System setup minerals pH Balance goal 6.8 Water to top off

System Initial Settings:
 pH-potential for Hydroden
 GH-general hardness (KH)
 Seasoil fertilizer
 Nitrites & Nitrates levels
 Soil Suppliments
 Seasoil fertilizer, iron, lime
 Water temperature

3

Input
Input

Aquaculture - Fish
Raising aquatic animals/fish

Food & Nutrients from Hydroponics (in water)

Waste, particles Minerals & Nutrients

Water Circulation

Water Overflow

Functions Preformed for Aquaculture:
ddddd

Other

Output

Mature Fish
for food or to sell

4

Food: worms
black fly larva
commercial fish
food pellets

Output
worms
or Larva

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Sump Pump System: Waste particle filtering, Water recirculation, System Aeration

6

Compost:
Red worms or
black soldier fly

recycle

Worms Crop Waste

Input Output Output Output

Mature Plants
for food or to sell

7

People food
scraps

Hydroponics - Plants
Growing plants in water without soil

Water Overflow

Water Circulation

Waste, particles Food & Nutrients

Functions Preformed for Aquaculture:
 bio-filtration
 mineralization (solids breakdown/return to water)
 mechanical (solids removal)

Other:

8

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A B C D E F G H I J K L M N O P Q R S T U V