PORTABLE FARMS™ AQUAPONICS SYSTEMS FACT SHEET

Portable Farms LLC is proud to offer fully installed, turn-key **Portable Farms™ Aquaponics Systems** (patent pending) to customers throughout the United States and Canada. Using our network of authorized Sales and Installation Representatives, *Portable Farms LLC can help you realize your dreams of access to organic, affordable, healthy food grown in an environmentally sustainable way!*

Yearly Production from one Portable Farms™ Aquaponics System (patent pending)

- ✓ A single 6' x 8' (1.8m x 2.5m) unit produces 400 vegetables and 100 lbs (45 kgs) of fish per year
- ✓ A single 10' x 20' (3m x 6m) unit produces 1,100 vegetables and 400 lbs (180 kgs) of fish per year
- ✓ A single 20' x 30' (6m x 9m) two tank unit produces 3,600 vegetables and 1,400 lbs (635 kgs) of fish per year
- ✓ A single 90' x 120' (30m x 30m) unit produces 60,000 vegetables and 23,000 lbs (10,400 kgs) of fish per year

Although aquaponics (the simplest definition being "the symbiotic cultivation of plants and aquatic animals in a recirculating environment") has been around in various forms for thousands of years, Portable Farms LLC has devised proprietary ways to ***produce yields that fall well within established production parameters*** for existing aquaponics systems, but with a ***much more stable system requiring less intervention***, featuring ***much greater environmental sustainability*****,** when compared to competing technology:

- ✓ **No chemicals (that means no pesticides, herbicides or fungicides), fertilizers, nutrients, antibiotics or buffers** need to be added to the system to enhance the growth and the health of the plants and fish, and there is no need to continuously monitor the nutrient levels, pH, salinity, oxygen or anything else in the water or gravel.
- ✓ The system **self-regulates in extreme environments**, meaning comparable yield is generated even when running Portable Farms™ Aquaponics Systems in hot desert or wintry climate – although a greenhouse or other protection from the extreme elements is required, the ambient environment surrounding each unit does not have to remain within tightly controlled temperature and humidity ranges for the Portable Farms™ Aquaponics System to function well. Using Grow Lights, Portable Farms™ Aquaponics System can thrive in low sunlight environments, even in basements and warehouses.
- ✓ Daily operations and maintenance can be accomplished by a responsible 14 year-old for units as large as 20' x 30' in **as little as 20 minutes per day**. One full-time trained worker can operate and maintain over one quarter (1/4) of an acre of Portable Farms™ Aquaponics Systems.
- ✓ The energy requirement for a 20' x 30' (6m x 9m) one tank unit **normally runs on 12 to 60 watts**, with spikes that never exceed 360 watts (assuming no grow lights are utilized) – normal usage on competing technology is much higher, typically in the range of 500-1,500 watts. As units are aggregated, these savings prove to be substantial. Portable Farms™ Aquaponics Systems are designed to be compatible with existing solar panels and wind power, permitting the use of Portable Farms™ Aquaponics Systems in distant rural locations without access to an electrical grid.
- ✓ The system has been designed to **prevent catastrophic loss of fish** (a common hazard in existing technology) and to minimize greatly the effects of a power failure or technical problem by eliminating the risk of a cascading failure in larger installations.
- ✓ Like other true aquaponics systems, **fresh water usage and waste is dramatically curtailed.** Portable Farms™ Aquaponics Systems use a small fraction of water compared with an in-ground garden (between 90% and 95% less).
- ✓ The payback or **Return on Investment** ranges from 8 years for a small (6' x 8') home unit to less than 2 years for a commercial unit (90' x 120') growing specialty crops such as basil or other herbs. The units also guarantee a level of **Food Safety and Food Security** that is seldom available with any other type of system.
- ✓ Portable Farms™ Aquaponics Systems aspire to be **Carbon Negative** in terms of their impact on global warming. This would be in addition to delivering significant amounts of fresh produce and low-fat protein to local populations in a truly sustainable manner.
- ✓ Portable Farms™ Aquaponics Systems **raises organic vegetables and fresh fish, every day of the year**. • Increases Food Security • Offers Dramatic Reduction in Water Usage (90% or more) • Requires Minimal Daily Upkeep and Operations • Brings Food Production Practices into the 21st Century
- ✓ Portable Farms™ Aquaponics Systems **grows food that tastes like farm-fresh food**, rich with flavor and nutrients like you used to enjoy at your grandparent's farm.