

# Development of



# for automated grass measurement

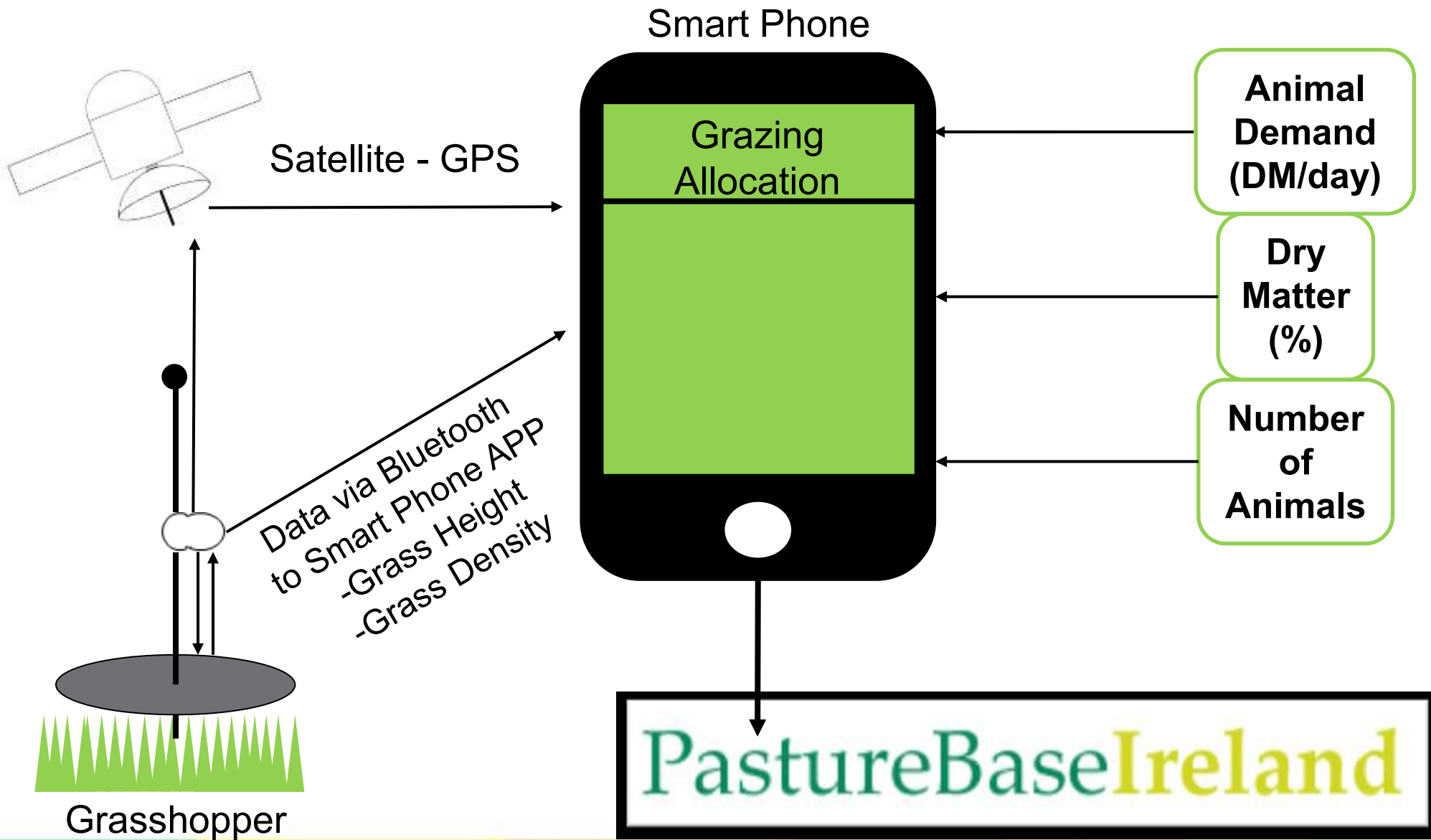
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Moorepark, Co. Cork, Ireland*

*and*

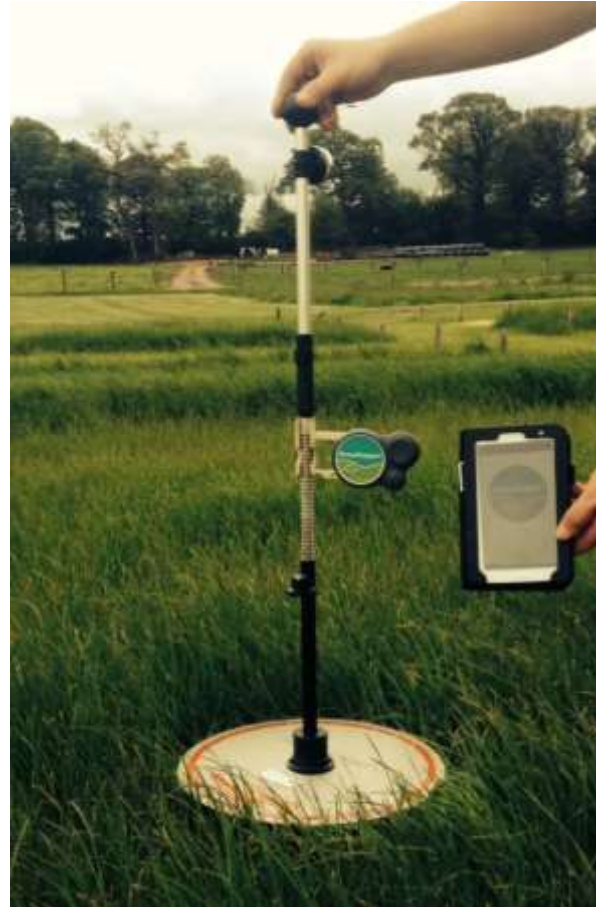
**P. Halton, TrueNorth Technologies, Co. Clare, Ireland**

# 1 = 1000 - 600000 - 1000000 - 10000000 - 100000000 - 1000000000 - 10000000000

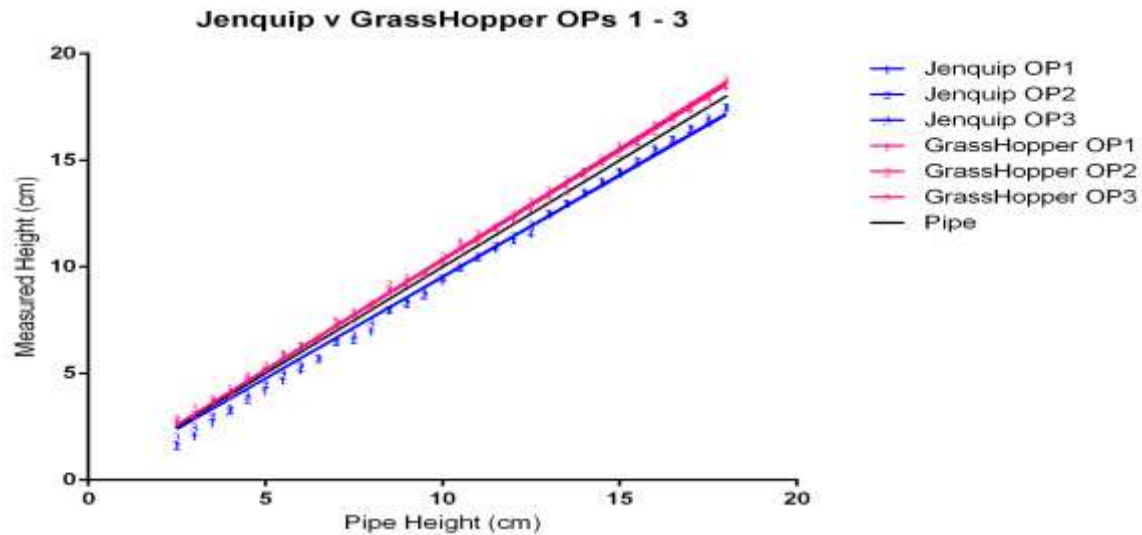
## GPS



# The Grasshopper Mk 1



# Validation Correlation Graph



	stdev	Coefficient of Variation (%)	Difference Average
Jenquip	1.77	0.031	-6.069
Grasshopper	1.64	0.020	3.67
Improvement	0.133	0.011	2.39

	Pearson Correlation					
	Pipe v Jenquip		Pipe v GrassHopper		Jenquip v GrassHopper	
	R	p value	R	p value	R	p value
Operator 1	0.9997	<0.0001	0.9997	<0.0001	0.9998	<0.0001
Operator 2	0.9997	<0.0001	0.9995	<0.0001	0.9995	<0.0001
Operator 3	0.9998	<0.0001	0.9996	<0.0001	0.9998	<0.0001

# App Development

## Feature Set



- **Easy to use – familiar interfaces**
- **Integrated with PastureBase**
- **Rich Information**
- **Usable with existing plate-meters**



### Integration with PastureBase will:

- Encourage PastureBase take-up
- Provide Growth Data at County or Regional Level
- Provide Historical Data for Analysis

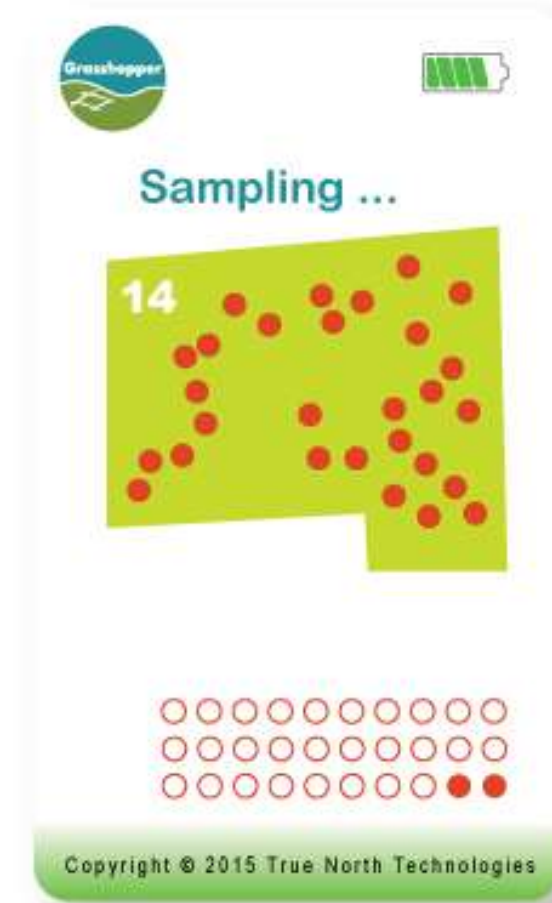




The screenshot shows a user interface for farm file management. At the top right is a green gear icon. Below it are four input fields: 'Farm ID', 'Default Residual mm', 'Samples Per Paddock', and 'Upload Survey to'. A blue 'SAVE' button is located at the bottom of the form area.

## Farm File Management allows the farmer to easily:

- Add or delete paddocks
- Change Residuals
- Change Herd Size / Allocations
- Include up-to-the-minute %DM
- Grazed Dates
- Soil Data
- Fertilizer Application Dates / Amounts
- Ground Scores ... and more.







### Paddock 14 Complete

HEIGHT	DMY
<b>93</b>	<b>1965</b>
<i>mm</i>	<i>kg</i>

**NEXT  
PADDOCK**

**CLOSE FARM  
SURVEY**



### UPLOAD THIS SURVEY

**NOW**

*(Mobile Data)*

**LATER**

*(WiFi / Cable)*



## Grasshopper

### Features:

- Easy to Use
- Robust
- Existing Plate Compatible
- Rich Data Set
- Auto Data Upload
- USB Recharge

Thank You  
For your Attention

