



SOKEROL

Education Pack:
Primary Level

With Bruce The Pelican!



THINK
before
you

POUR
down
the

SINK!



Hi there! I'm Bruce the Pelican, join me as I explain how cooking oils don't belong down the sink! But before we get started, here are some helpful phrases to know:



Definitions

FOGS: This stands for fats, oils and greases which are left over from cooking and are bad for the environment.

Wastewater: This is untreated water and sewage that goes down sinks, toilets, and sewer drains. It flows through sewer pipes on its way to be treated at wastewater treatment plants.

Wastewater Treatment Plant: A facility that receives wastewater and helps remove impurities in the water that are damaging for public health and safety. This includes greases and fats, human waste, dissolved pollutants, dangerous microorganisms and more. Unfortunately, Treatment Plants have a lot of water to clean and their job is made harder when Fats, Oils, and Greases clog up their equipment!

Ecosystem: Ecosystems are complex communities of all sorts of critters – even plants, all living together in a delicate balance. When cooking fats, oils and greases (FOG's) are poured down the sink it upsets this balance in various ways.

Environmentally friendly or Eco-friendly for short: This means something that doesn't harm the environment.

Biodegradable – bio-de-grade-able: An item that has the ability to break down, or decompose back into the natural environment without causing harm. An example of this is a banana peel in a compost pile, after a while it will completely decompose back into nature.

Sokerol – Pronounced Soak-er-rol: An eco-friendly material that soaks up oils, fats and greases to break them down and render them safe for the environment.

Lets get started!

Meet Bruce the Pelican

Bruce is an Australian Pelican – the largest of the seven species of Pelicans found around the world. Pelicans love water, and have diets that rely on fish and small sea life. FOG's contribute to water pollution, which is bad news for sea life and bad news for Bruce.



What are FOG's?

The problem starts when we pour any type of fat, oil or grease down the sink. Maybe it's left over olive oil in a pan from Mum's spaghetti, or some or some fat from that nice steak Dad cooked. These FOGs are attracted to other FOGs from the other households in your neighborhood where they solidify and coagulate together. While this happens, they are slowing the flow of wastewater to the treatment plant, and when they grow so big that they block the sewer, they will cause a wastewater overflow!

Why is this bad?

These blockages cause raw sewage to overflow the sewers and flow out into the environment. The sewage is full of all kinds of dirty and damaging stuff, which pollutes the water and can make people and wildlife sick. This interferes with eco-systems built around the effected water source (such as a lake, stream or your favourite beach.)

FOGs can wreak havoc on septic tanks the same way. Can you imagine if you flushed your toilet and the sewage went directly into your yard? That is what can happen when a septic tank gets blocked by FOGs. FOGs not only compromise the quality of our water supply, but the blockages cost a lot of money to fix too!

What can I do to help?

Some people dispose of their FOG's by pouring them in the bin. Whilst this is slightly better, it still causes problems for the environment. FOG's can leach from landfill sites into the ground and surrounding water sources, and then we're back to square one.

We can stop the pollutants from entering the water sources in the first place by using what is known as the Sokerol FOG Trap. As the name suggests, the FOG's are poured into the specially designed cup and the Sokerol soaks up and traps the oils, fats and greases. It then naturally biodegrades the FOG's (breaks them down into teeny tiny pieces) and neutralizes them before they cause any trouble! It's an easy process that makes a difference!



Did you know...

71% of the Earth's surface is covered by ocean.

The ocean supports the life of nearly 50 percent of all species on Earth!

It takes only 1 litre of oil to contaminate 1 million litres of water!

Many fats, Oils and greases solidify when they cool - that means they go from a liquid to a solid. This is how they harden up and cause blockages!

FOG's that make it through to the ocean can deplete oxygen, damaging fish and other organisms that inhabit the environment.

Fish need oxygen too! Fish breathe through their gills by taking in water and filtering out the oxygen.

Fats and oils can coat feathers and fur, making it difficult for animals to move around.

Droplets of oil can attract and merge with other contaminants in waste water that are bad for the environment, animals and even you and me!

The FOG's from restaurants, homes and industrial sources are the most common cause of blockages.

Each year, blocked or broken pipes result in the release of up to 10 billion gallons of sewage!



Activity Pages

Where do you think the blockages may occur?

Where do you think water pollution may occur?

What might the consequences be?



FOG Word Search



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



fats
oils
greases

waterways
compost
sokerol

environment
biodegradable
ecosystem

pollution
sink
sewer

Word Scramble

Unscramble the words to find the answers!

_____’s stands for fats, oils and greases!

(GOF)

Bruce is a _____ .

(nalpeic)

FOG’s contribute to water _____ .

(lopltuion)

FOG’s don’t belong poured down the _____ .

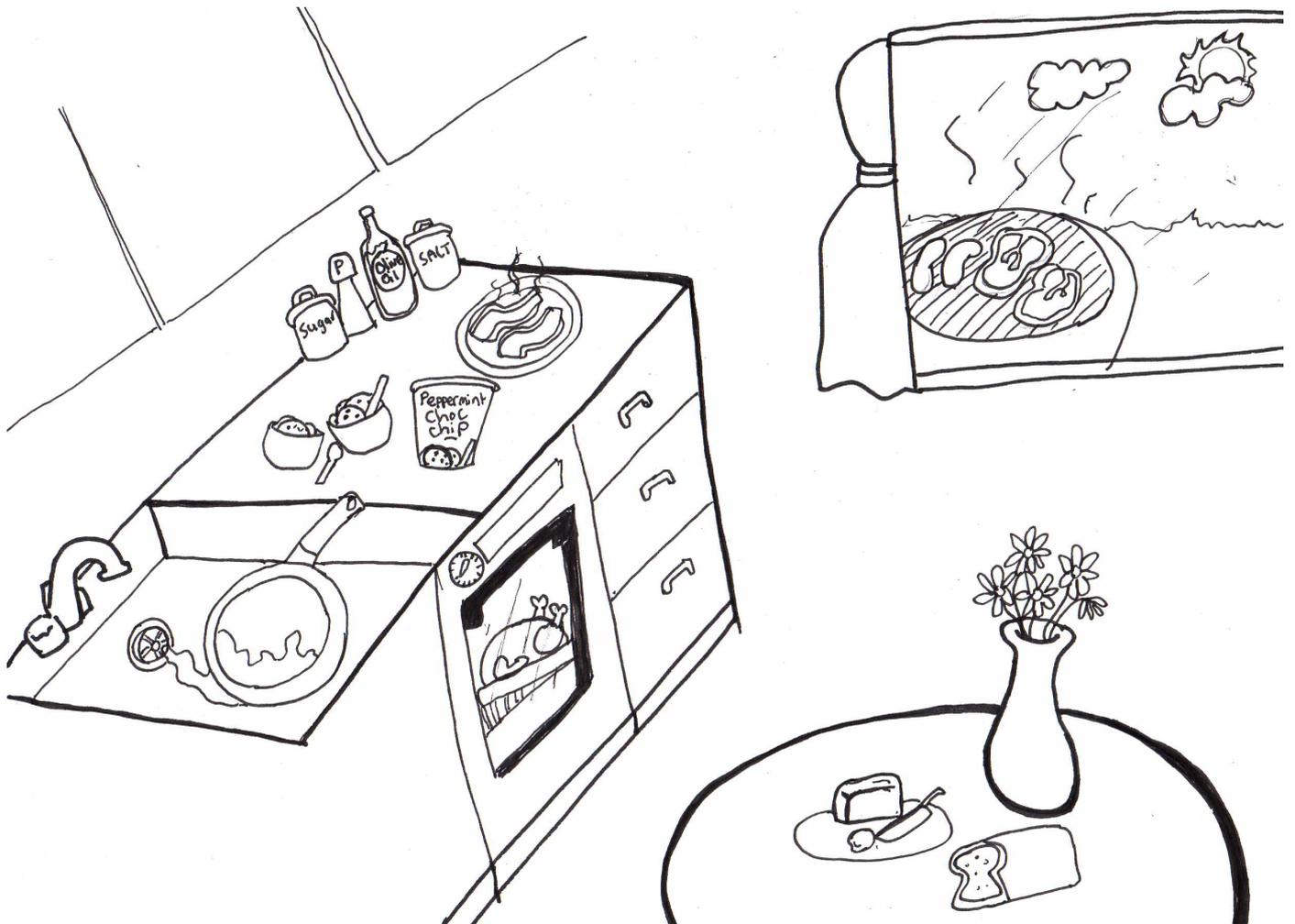
(snki)

Become a FOG _____ !

(ghiFtre)

Oil Toiii

Can you find the FOG causing culprits?

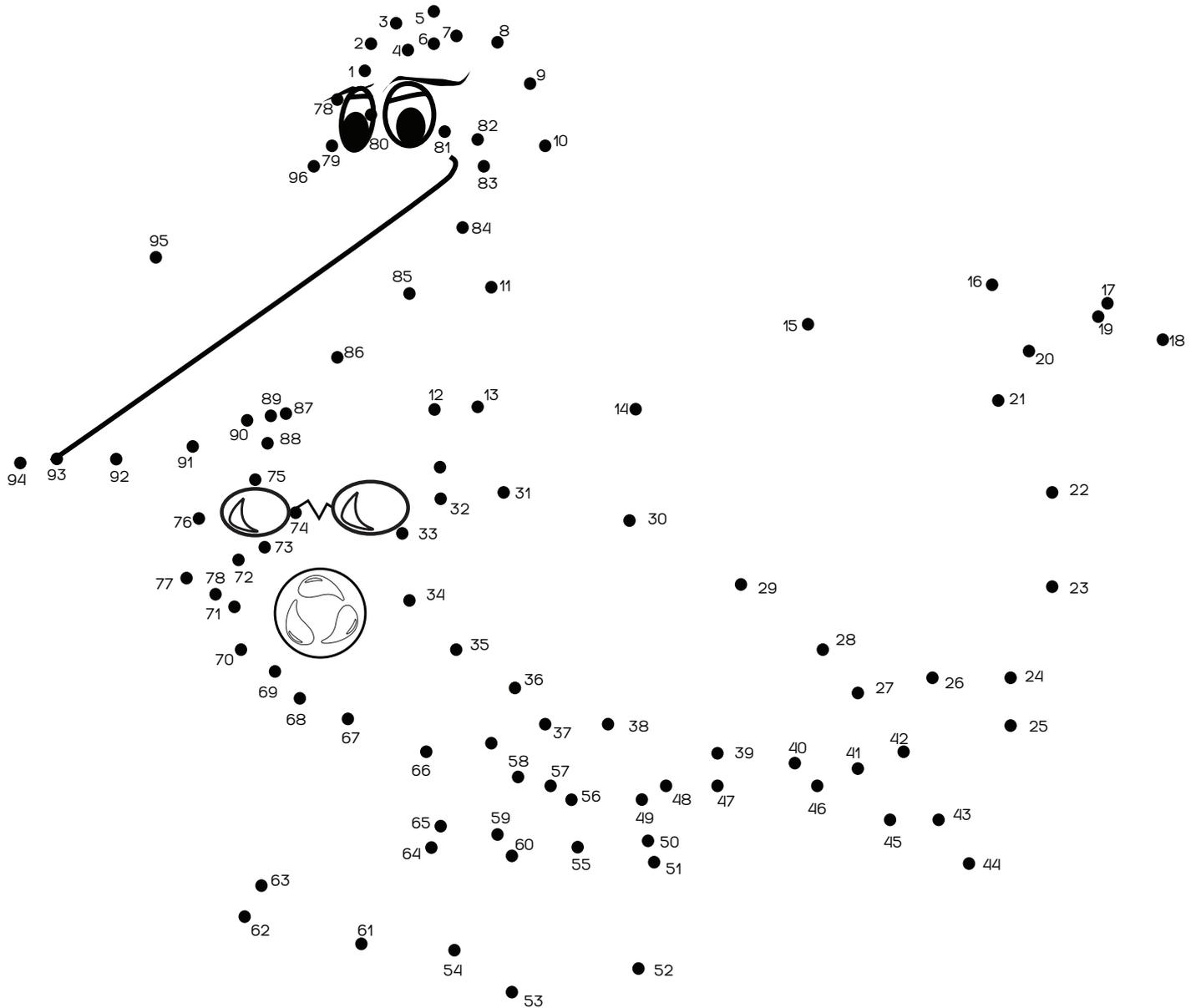


Hint: There is seven in total.

Connect the dots to produce Bruce!

Did you know the average Pelican beak is 18 inches long?

If you're feeling creative you can colour him in after you're done.



Experiment: The Oil Vanishing Act!

You will need:

- A glass of water
- Some cooking oil
- Some Sokerol

What to do:

Grab a glass, fill it up with enough water but leave some room to pour other items in the same glass.

Carefully tip out some Sokerol into the cup.

Next, pour a little oil in the glass. Could be olive oil, vegetable oil – whatever is in the cupboard – a darker colour oil is even better! Now it's time to watch the Sokerol work!



After a few minutes check look at the glass.

Can you see any oil?

What about if you scoop out the Sokerol?

Record your findings in the space provided.

Quiz Time

Where do FOG's come from?

Why are FOG's bad for the environment?

How do FOG's effect ecosystems?

How do FOG's effect local sewer systems?

Questions to ask Mum or Dad.

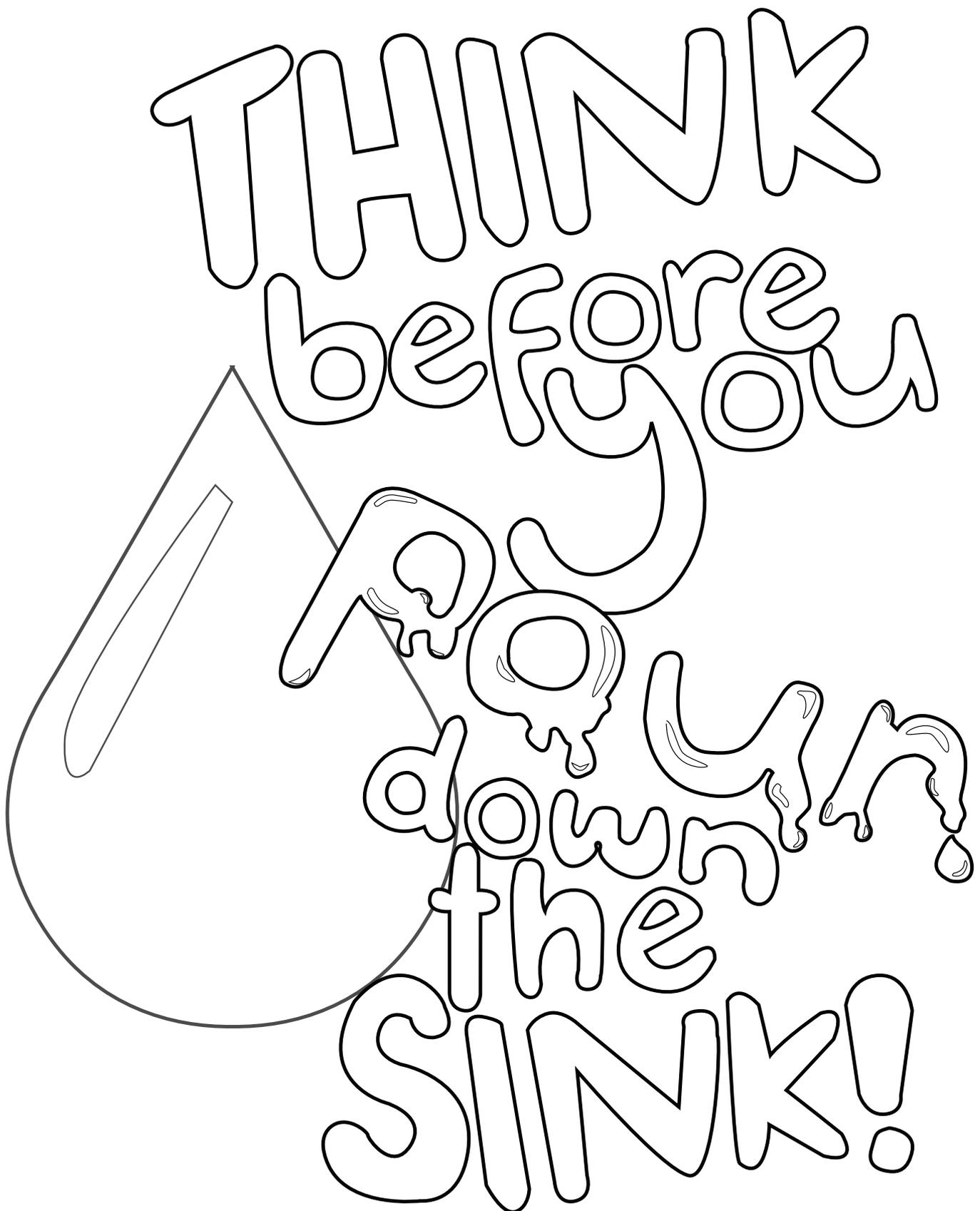
When your Mum or Dad cooks, Do they use fats, oils or greases when cooking?

What do they with the oils, fats and greases when they are finished?

Do they know about the effect fats, oil and greases have on the environment?

Colour-in the image, get creative!

And remember, think before you pour down the sink.





Proudly brought to you by Sokerol FOG Trap,
Fighting FOGs one sink at a time!
For more information, visit www.sokerol.com



Congratulations on completing the activity book!

You are now a genuine FOG Fighter!

See you around,

Your friendly pelican, Bruce!