

XBirds v1.00

Overview

XBirds is Simconnect controlled bird autogen for your FSX and P3D skies.



Credits

The bird models come from Ivar Danielsen's FS9 "Animals of the World" series.

Search on Simviation.com if you want more of Daniel's animals.

Installation

The XBirds.exe file can be run from any directory provided the active user has Write permissions on that directory. There are versions for both the Service Pack 1 & 2 of FSX.

From Windows 8 onwards, the Program Files directory has limited permissions, it is therefore recommended that you install the XBirds_exe folder into the folder used for your saved flights within "My Documents".

The aixBirds folder must go into your \Simobjects\Animals\ folder, e.g.:

C:\Program Files (x86)\Lockheed Martin\Prepar3D v2\Simobjects\Animals

C:\Program Files (x86)\Microsoft Games\Microsoft Flight Simulator X\SimObjects\Animals

This Step tells you how to set up the application for auto loading using the exe.xml file. You don't have to carry out this step if you wish to start the application manually.

In C:\Users\%UserName%\AppData\Roaming\Lockheed Martin\Prepar3D\, look for an *exe.xml* file.

If you have never installed any add ons, then you may not have an *exe.xml* file. If you don't have one, open Notepad, and paste all of the text below into it, then save it as *exe.xml*.

```
<?xml version="1.0" encoding="windows-1252"?>
<SimBase.Document Type="Launch" version="1,0">
  <Descr>Launch</Descr>
  <Filename>exe.xml</Filename>
  <Disabled>False</Disabled>
  <Launch.ManualLoad>False</Launch.ManualLoad>
```

```
<Launch.Addon>  
  <Disabled>False</Disabled>  
  <ManualLoad>False</ManualLoad>  
  <Name>P3D Native 3D</Name>  
  <Path> C:\Users\Rich\Documents\Prepar3D v2 Files\XBirds\XBirds.exe</Path>  
  <CommandLine></CommandLine>  
  <NewConsole>True</NewConsole>  
</Launch.Addon>  
  
</SimBase.Document>
```

If you already have an *exe.xml* file, open it with Notepad and add just the bit in bold blue above. It should be added above the *</SimBase.Document>* line in your file.

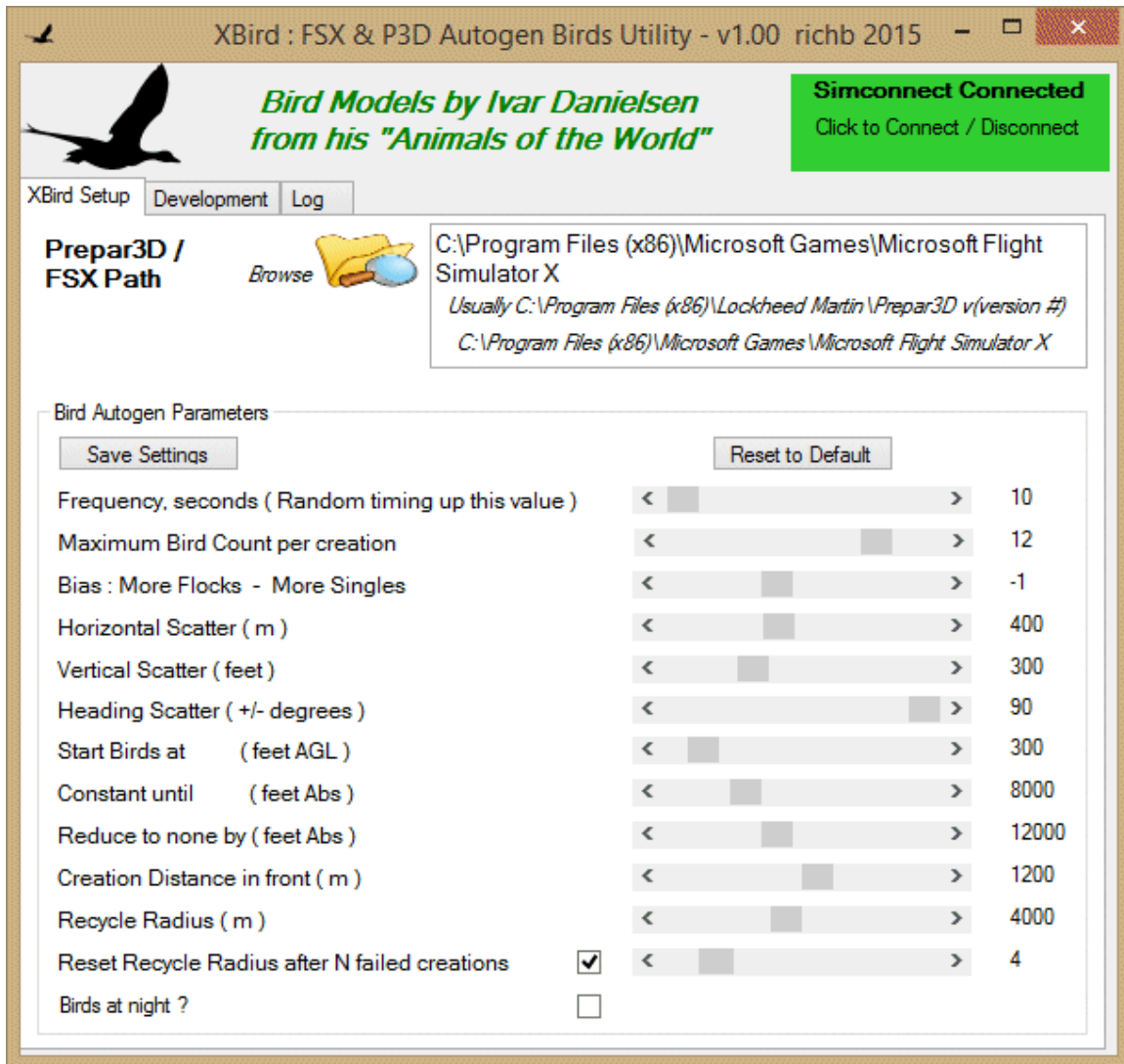
Ensure the *<Path>* line points to the location where you installed the XBirds directory containing Xbirds.exe



Using XBirds

- Start FSX / P3D. If you added XBirds to the exe.xml file, it should start automatically. You may be prompted the first time asking whether to trust this file. Reply *Yes*. If you didn't add XBirds to the exe.xml file, you will have to start the XBirds.exe utility manually.
- If Simconnect has successfully connected to FSX / P3D, then in the *Add-ons* menu option should be a new menu item, *XBird FSX & P3D*.
- If the XBird FSX & P3D is not in the *Add-ons* menu, then find the *XBirds* program on your running programs on the task bar and bring its window up. The Simconnect indicator is probably red indicating that Simconnect has not connected to FSX / P3D. Click on the red indicator to try to connect again. It will turn green once connected, and the *Add-ons* menu items should then be present.
- Click on the *Add-ons* menu option *XBird FSX & P3D, Show Options Window*. The XBirds form should be displayed. Ensure that the FSX / Prepar3D path points to the folder where your FSX.exe / Prepar3D.exe is located. If not, type it in the text box or browse to it, then *Save Settings* so that the path gets stored in your cfg file.
- Go back to FSX / P3D, *Add-ons, XBird FSX & P3D*, and select *Start XBirds AutoGen*. XBirds will pause the simulator for about 5 seconds whilst it spawns the bird objects. It will unpause when it is done. If you were already paused, don't unpause for 5 seconds after *Start XBirds* otherwise the bird setup may fail. If you did unpause too soon, and aren't seeing birds after 30 seconds or so of flying, *Stop XBirds, Start XBirds*, wait the 5 seconds to try again. There is further Troubleshooting at the back of this document.
- Birds should now auto generate in your flight path. Note that the default setting is to initiate auto generation at 300 ft above ground level after takeoff. You can decrease or increase this with the slider settings in the Xbirds window accessed through the *Add-ons* menu.

XBird Setup page



Prepar3D / FSX Path. Set the Prepar3D / FSX path to the folder where your FSX.exe / Prepar3D.exe is located. Click *Save Settings* to save the path to the cfg file.

Frequency, seconds. Injects birds at a random interval between 0 and X seconds, where X is the slider value.

Maximum Bird Count per creation. Each autogen cycle has a maximum number of birds of this slider value. The actual number is random up to this value and is also controlled by the Bias slider to influence whether lower or higher counts are generated more often.

A random count of 1 or 2 will result in a Non Flock bird type and 3+, a Flock bird type. Of the birds provided, raptors like Eagles and Condors are Non Flock, whilst Geese and Swans are Flock birds.

Bias More Flocks – More Singles. Skews the random generation towards Flocks for Negative values and Singles for Positive value.

Horizontal & Vertical Scatter. Area over which the birds will be randomly distributed when they get generated.

Heading Scatter. Direction in which the birds fly after generation. Low values are more focused in the path of your aircraft, both towards and away from, whilst larger values mean the birds fly off sideways also.

Start Birds at (feet AGL). Starts bird generation once you are this height off the ground.

Constant until. Keeps injecting at the frequency and count you set with the sliders until you reach this height.

Reduce to none by. Reduces the frequency and count in a linear manner until this altitude, after which birds no longer get generated, so you can set your jet to auto pilot at cruise altitude without worry about bird strike.

Creation Distance in front. How far ahead of you the birds are created. Too small and you may see them pop into view, too large and they would have scattered significantly before you reach them, although that depends in part on how fast you are flying.

Recycle Radius. Beyond this radius from your aircraft, the birds are available to be "recycled" to position in your path again.

Reset Recycle Radius after N failed creations. If the birds are all within your recycle radius and none have been available for X creation cycles, then if this setting is active, it will remove all birds behind your aircraft to make them available for use again. You shouldn't notice this when looking forward, but if looking backward, or spot view from a long way back, you may see some birds vanish.

General Information

There are a fixed amount of birds generated that are continually “recycled” into the path of your aircraft.

If you have a high bird creation rate, i.e. frequent injection of high counts, and a large recycle radius, the bird creation may slow down because all of the birds are still within the "Recycle Radius" of your aircraft and only get recycled to the front at the rate they become available out the back of the recycle radius. In this case you need to decrease your recycle radius and/or reduce your bird creation settings.

The same problem may occur if you are flying around a small area, say in a helicopter. The birds may not be leaving the recycle radius fast enough to keep up with how fast you have asked to create them in front of you.

The solution to the above is not just to double or triple the amount of birds used, as this will probably hit your frame rates too hard.

No, the current birds do not flap their wings. These ones have mastered the art of being extremely good at gliding and are now too lazy to flap. You could however add some flappy bird models to the aixBirds folder. Names go from “aix_F00_birdname” to F09, and F10 to F19. The first digit designates whether it is a Flock type bird ‘0’ or a Non Flock bird ‘1’. You could also add flying pigs and unicorns if you really wanted to.

If some 3D modeller wants to release some flapping birds to go with this, be my guest.

Yes, the birds can crash your plane if you have detect collisions with other aircraft ticked. It seems to take a pretty direct hit to do this however, not just a minor scrape.

Ivar Danielsen kindly gave permission to distribute with this application birds from his “Animals of the World” series. I’m a programmer, not an artist, so I appreciate Ivar making these available.

Troubleshooting

.NET errors

The program requires that you have .NET Framework 3.5 installed.

This is readily available on the Internet.

Simconnect not connecting

XBirds v1.00 is compiled for the SP1 Simconnect dll version 61242 / 61355.

XBirds v1.01 is compiled for SP2 Simconnect dll version 61259 / 61637. I need to run this version for P3D.

No Birds

Things can go wrong with the initial spawning of the bird objects and read back of their object ID's, especially if you unpause too quickly. Try *Add-ons, XBird FSX & P3D*, select *Stop XBirds AutoGen*, then *Add-ons, XBird FSX & P3D*, select *Start XBirds AutoGen*. Ensure your aircraft is stationary or paused during start.

If this does not appear to be the issue, check the slider and make sure that you are not below the "Start Birds at" height or above the "Reduce to none by" height.

Check that Simconnect is green for connected, and that you don't have a "Check Path" error, indicating that the path you gave (or didn't give), does not contain the folder /SimObjects/Animals/aixBirds/

If the birds were creating, but have since dried up, read the General Information about the bird recycling process.

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