Perhaps unsurprisingly, conservationists are starting to ask whether the rise of computer games in popular culture – and the time and effort devoted to them by users – can be harnessed to benefit conservation.

Between Sept-Dec 2011 I reviewed literature on environmental games and ‘gamification’, reviewed existing games and conducted a series of in-depth interviews with key individuals developing or looking to create environmental games. Below are my key insights on the topic for anyone looking to design and build environmental games to benefit conservation. This research is currently being worked up into a series of academic articles discussing the potential to mobilise the time, effort and perseverance devoted by users to computer games for positive environmental actions.

1. For any game, **entertainment** must be the number one priority. There is no point in making an amazingly educational and scientifically sound game that no-one plays. Fun games need a clear role for the player and must inspire a sense of “winning”, and they often benefit from a light storyline that doesn’t berate a cause. For more tips on making a fun game, there are many resources within professional and amateur game development communities. Don’t be afraid to ask for help!

2. When you create your game, build in ways to **evaluate** its success and traction. Be careful to focus on key metrics such as uptake, continued play and financial success as opposed to **vanity metrics** such as number of press releases sent.

3. Conservationists are rarely also game developers. The gaming industry is worth $68 billion dollars worldwide and games for nature will be competing within a tough industry. Use **expert** and **professional advice** to make sure your ideas are feasible and have a good chance of success.

4. Consider the **time and cost** involved in making a game. Some very well-financed and supported games for nature have still had very limited success – Facebook game **Ecotopia**, for instance, has only retained 4,000 monthly players as opposed to the more mainstream Farmville which boasts 63 million active users.

Because of the risk involved with creating a game from scratch, consider partnering with a previously successful franchise. For example, **BirdLife International** has partnered with Ruvio, the game developers behind hugely successful mobile phone app **Angry Birds**, in order to create awareness around bird extinctions.
5. It might be possible to harness the community of people who play online games without creating a game at all. Jane McGonigal believes that hard-core gamers have learned four key personality qualities: urgent optimism, strong sense of social fabric, blissful productivity and epic meaning. Is there a way for your conservation organization to tap into these traits?

6. It is also possible to use your game for citizen science research purposes, as has been done by protein folding game Fold It. To maximize the impact of your project on communication outreach make sure you include mechanisms such as well-moderated forums to facilitate dialogue.

7. Education and outreach are not the only potential uses of games: they can also be an amazing tool for fundraising. The virtual goods market is worth £1.6 billion dollars, and organizations like PlayMob are starting to tap into this by dropping purchasable goods into popular games and donating the resulting funds to charities.

8. If you do want to use your game for outreach and education, remember that fun, accidental learning is more effective than earnest, boring messages. People do not want to feel guilty during their down time, and they will be frustrated if their gameplay is interrupted by forced learning.

9. Some conservation goals are not readily met by the creation of a game. For example, behavioural changes in the real world are especially difficult to inspire through via gaming. Fundraising, on the other hand, may be much easier to do.

10. Choose your goal first. Are you trying to promote a cause? Educate the public? Fundraise? Each goal will need a different strategy and type of game. Second, identify your audience. “Gamers” are as homogenous a group as “film-goers,”, and you won’t be able to reach them all the same way.

Good Luck and Have Fun!