Workshop Concept Note

Title: *Using UAS (Drones) to Strengthen Conservation Practice*
Duration: 3 Hours
Target Audience: Environmental organisations, conservation practitioners, and community groups (e.g. Vermont Conservation Foundation)
Facilitator: Skyreach Consulting

Purpose

To equip conservation practitioners with **practical, accessible skills** to use Unmanned Aerial Systems (UAS) as tools to enhance environmental monitoring, planning, and decision-making—while ensuring safe, ethical, and context-appropriate use.

Key Outcomes

By the end of the workshop, participants will be able to:

- Understand how UAS can support **conservation and environmental management**
- Identify practical applications such as **mapping, habitat monitoring, and biodiversity tracking**
- Understand the basics of **safe, legal, and responsible drone use**
- Use aerial data to support **evidence-based conservation decisions**
- Design simple **UAS-supported workflows** for their own projects
- Build confidence in adopting **cost-effective, scalable technology tools**

Workshop Structure (3 Hours)

1. Welcome and Context Setting (30 minutes)

- Introduction to participants and conservation contexts
- Key challenges in local conservation efforts

Overview: What is UAS and why it matters for conservation

Grounding principle: *Technology as an enabler, not a replacement for field knowledge*

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2. Practical Introduction to UAS (45 minutes)

- Overview of drone types and capabilities
- Understanding aerial data (imagery, mapping, video)
- Introduction to South African regulatory considerations (high-level)

Demonstration:
Example outputs such as aerial maps, habitat imagery, or site surveys

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3. UAS for Conservation Applications (45 minutes)

Using drones for:

- Habitat and vegetation monitoring
- Mapping and land-use assessment
- Wildlife observation (where appropriate and ethical)
- Detecting environmental changes over time

Group Activity:
Participants identify one conservation challenge and explore how UAS could support it

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4. From Data to Insight (30 minutes)

- Turning aerial imagery into usable information
- Basic concepts:
- Orthomosaics and mapping
- Visual analysis for decision-making
- Linking data to conservation planning and reporting

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5. Planning a Simple UAS Mission (20 minutes)

Key considerations:

- Flight planning basics
- Safety and environmental sensitivity
- Working within resource constraints

Quick Exercise:
Participants outline a simple drone mission for their own context

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6. Wrap-Up and Next Steps (10 minutes)

Key takeaways

- Opportunities for further training or collaboration
- Integrating UAS into ongoing conservation initiatives

Approach

- Highly **practical and application-focused**
- Grounded in **local conservation realities**
- Designed for **accessible, entry-level adoption**
- Emphasis on **responsible, ethical, and sustainable use of technology**

Value for Partners (e.g. Conservation Orgs)

This workshop offers a **scalable, high-impact approach** to:

- Strengthen conservation monitoring capacity
- Improve environmental decision-making
- Support community-based conservation initiatives
- Introduce **innovative yet practical tools** into existing projects
- Extend the impact of current investments in environmental protection

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Closing Statement

By equipping conservation practitioners with practical UAS skills, we enable them to **see, understand, and respond to environmental challenges more effectively**—amplifying their impact through informed, data-driven action.