A Global Resource for Orchid Societies

A GUIDE TO BUILDING ETHICAL ORCHID COLLECTIONS AND SOCIETIES

Developed by the IUCN SSC Orchid Specialist Group – Global Trade Program and Orchid Societies from around the world.

This resource presents suggestions for how Orchid Societies can help promote best practices among our members, events and community, to foster sustainable collections and Societies. It seeks to balance our enjoyment of plants with our shared commitment to species conservation in the wild.

The document suggests key topics, principles and positions that Societies can edit and adopt according to their context. It is not a fixed set of rules, nor will every point be relevant or appropriate for all Orchid Societies. Instead, it aims to be flexible, inclusive and useful to orchid growers around the world.

This document was developed by members from the IUCN SSC Orchid Specialist Group - Global Trade Program, which provides expertise on the trade and sustainable use of orchids - one of the largest and most traded groups of plants globally. It is part of the IUCN Species Survival Commission, a science-based network of more than 10,000 volunteer experts worldwide, working towards a vision of "a just world that values and conserves nature through positive action to reduce the loss of diversity of life on Earth".

The resource was developed with inputs from Orchid Societies from around the world, including:

- American Orchid Society, USA
- Asociación Guatemalteca De Orquideología, Guatemala
- Asociación Salvadoreña de Orquideología, El Salvador
- Associazione Orchidofili Centro Italia, Italy
- Botanical Society of China: Orchid Branch, China
- Hardy Orchid Society, UK
- Hong Kong Artistic Orchid Association, Hong Kong
- Indonesian Orchid Society of Batu and Malang Raya, Indonesia
- Lanka Native Orchid Conservationists, Sri Lanka
- Naples Orchid Society, USA
- Nepal Orchid Floriculture Group, Nepal
- Orchid Society of Eastern Himalaya, India
- Redland Professional Orchid Growers, USA
- Sarawak Orchid Society, Malaysia
- Susquehanna Orchid Society, USA
- Taiwan Orchid Growers Association, Taiwan
- The Orchid Society of Karnataka, India

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INTRODUCTION

There are Societies of orchid growers and enthusiasts all over the world. Our organisations differ considerably – including in terms of the species we collect, our activities and interests, how we source our plants, the options available to us for sourcing plants, and our demographics – but we share a common passion for the largest, most diverse group of flowering plants in the world. And although the ways and extent of our engagement with conservation also varies considerably, we also share a common interest in the long-term survival of orchid populations and species in the wild.

Unfortunately, our shared interest in orchids is also responsible for one of the leading threats to their survival in the wild: harvesting of orchids from the wild. Although habitat destruction is a key threat to orchids, ornamental trade of wild plants remains a widespread, intense and targeted threat to many orchid species around the world.

Why is harvest from the wild a threat to many orchid species?

Orchids are threatened by many different factors, including habitat loss, habitat degradation and climate change. Many species are also threatened by intense, targeted harvest from the wild. Although there is very little research on the impacts of over-harvest on wild orchid populations, many commercially-harvested wild orchids are known to be in decline. Some orchids have already gone extinct in the wild due to over-harvest. There are a number of ways and reasons that harvesting, trading and buying wild plants can threaten orchid species, such as:

- **Naturally rare species**. Many collectors are interested in orchids that are naturally rare and restricted to particular environments, such as many Paphiopedilum lady slipper orchids and 'micro-orchids' such as Masdevallia. This rarity is both what makes them attractive to some collectors, and also means that they are highly vulnerable to over-harvest.
- **Long-lived species.** Many orchid species have long lives and take years to mature, flower and disperse their seeds. For example, Cattleya orchids can take 4-7 years to reach flowering size. This, combined with the low germination rate of many orchid species, means that wild populations are slow to regenerate after harvest. One study found that harvesting as little as 5% of mature individuals from a population would result in its extinction within 100 years.
- **Large-scale harvest.** Some species may be relatively common in the wild, such as some Dendrobium and Cattleya species. However, when these are subject to repeated, large-scale harvest for commercial trade, the populations can quickly decline.
- **Human passion for orchids.** Orchids have a unique place in the public imagination, and have motivated collectors around the world. This passion to collect orchids has sometimes overlooked the impacts on species survival.

Wild harvest is often driven by international trade and commercial collectors, but it also involves local markets in many countries, as well as large-scale harvest by private and semi-professional collectors. And although illegal harvest and trade often involves hobbyists from outside of well-meaning Societies, it is a challenging reality that it is also often common practice within many others.

One of the purposes of this document is to establish guidelines for the future, rather than focusing on events or practices that may have occurred when regulations and understandings of the natural environment were different. However, due to the current state of wild orchid populations, all Societies must now be involved in establishing ethical codes to ensure the long-term conservation of these plants.

Orchid Societies have a unique role to play in species conservation, regardless of whether they have an explicit conservation mandate. Making this link more explicit, including through the development of carefully-considered local positions on orchid conservation and the use of wild-harvested plants, is important to protecting this family of plants.

EXAMPLES OF ORCHIDS THREATENED BY HARVEST FOR ORNAMENTAL TRADE

Many orchid species around the world are directly threatened by wild collection. Harvest is often a very intense and targeted pressure on wild populations that is compounded by climate change, habitat destruction, and loss of pollinators.

Guarianthe skinneri

This iconic species is the national flower of Costa Rica. Found across Central America, it was once common and found in large colonies in the wild. However, intensive illegal harvest by orchid collectors and the general public has dramatically reduced populations across its range, and it is considered threatened in Mexico.

Paphiopedilum canhii

Native to Vietnam, this species was only discovered in 2010, when wild plants emerged in illegal trade. Scientists traced the plants back to a small wild population. By 2014, an estimated 95% of the population had been illegally harvested for trade. It is now listed as Critically Endangered, and is likely extinct in the wild. A number of other highly collected Paphiopedilum species across Southeast Asia are also threatened by local and international trade.

Dendophylax lindenii

Found in a small number or wetlands in the U.S. State of Florida and Cuba, this speices has long been subject to illegal harvest, desired for its exotic flowers and rarity. Wild populations are estimated to have declined by 90%, with fewer than 1,000 mature individuals left in the wild. The species is currently under review for protection under the U.S. Endangered Species Act.

Cypripedium calceolus

Widely distributed across Europe and Asia, this species is the largest flowered orchid in Europe. Long harvested as an ornamental, illegal trade is a documented threat to its survival in at least 25 countries. While not threatened over much of its range, it is now extinct in Belgium, Liechtenstein, Luxembourg and the Netherlands; was virtually extinct in England until it was reintroduced, and is threatened in several countries.

Constantia cipoensis

Found only in parts of Minas Gerais, Brazil, this is one of 4 species in the genus, all endemic to Brazil. The species is targeted for the ornamental orchid trade because its charismatic flowers are large relative to the size of the plant. The species is now likely Critically Endangered.

Angraecum longicalcar

Found only in Madagascar's Central Highlands, this species was collected almost to extinction for its unusual shape and rarity. Illegal trade, including for international orchid collectors, remains a leading threat to the species, which is now Critically Endangered and the focus of intensive conservation efforts.

PURPOSE OF THIS RESOURCE

This resource presents ideas for how Orchid Societies can help promote practices among their members, events and community, to foster sustainable collections and Societies that balance our enjoyment of plants with species conservation in the wild. This document suggests key topics, principles and positions that Societies can edit and adopt into their policies, whether into statutory documents, a Conservation Code, a Code of Conduct, or informal best practices guidelines. The positions recorded in those documents then can help to inform members' expectations, awareness and practices – useful information for new members and a reminder for established growers. It is not a fixed set of rules, nor will every point be relevant or appropriate for all Orchid Societies. Instead, it aims to be flexible, inclusive and useful to orchid growers around the world.

The resource has been developed with inputs from Societies around the world. Their inputs reflect a broad range of contexts, experiences, and differences of opinion and approach. That is why this document provides a range of suggested options, which Societies can consider based on what is appropriate and acceptable to their members and context.

Each Society and context are different, and so this serves as a general resource that Societies can tailor to their needs.

Why taking a public position on ethical orchid collections and Societies matters

Societies are often centres of our orchid communities – where we share, learn, display, trade and enjoy orchids. Societies also help to shape not only the rules of our groups, but also the social norms within our communities, important to establishing expectations, promoting best-practices, and educating young and new orchid growers and the general public. Where members are involved in unsustainable and unethical practices, our Societies can also help to educate them and shift social norms towards increasingly sustainable and conservation-centric standards.

This resource is divided into 4 main sections, providing suggested positions and points of consideration for each topic that a Society could use in developing its own locally-appropriate resource:

- The plants we own
- How we source our plants
- Maximising the conservation value of private collections
- Promoting conservation within Orchid Societies

Some of the suggestions provided here may already be informally addressed within Societies. We suggest that there is a benefit in making positions and policies clearer and more formal – to educate members, establish norms and shift behaviours to support conservation, and to increase fairness and transparency among members.

BUILDING ETHICAL ORCHID COLLECTIONS & SOCIETIES

1. THE PLANTS WE OWN

1A. Suggested position on owning wild-collected plants

Societies should take a public position discouraging their members from harvesting, buying, selling and exhibiting wild plants – particularly mature individuals, and species that are protected, threatened and/or have narrow geographic ranges. Even if wild orchid harvest is already illegal or restricted in a Society's country or region, a Society may still have an influential role in shaping members' understanding, perception and compliance with these rules.

In some countries and communities, irrespective of legal status, wild plants may form a major part of the local or traditional culture, and strict bans on harvesting wild plants may be impractical or unacceptable to the majority of its members. In these cases, Societies may still form principles and policies intended to reduce the negative impacts of unsustainable harvest, and promote more sustainable harvest approaches.

What about old plants harvested before modern conservation regulations?

Some members may be concerned that adopting pro-conservation positions will exclude mature specimen plants that they may have acquired from the wild before modern conservation regulations. There are a number of ways in which Societies can flexibly accommodate this, while still engaging with the concepts in this resource. For example, old wild-harvested plants can be clearly identified in exhibitions (see 1B), can be propagated to help increase public access to rare species (see 3A), and need to be protected to ensure their long-term conservation value (see 3B).

1B. Suggested position on exhibiting and awarding plants of wild or uncertain origin

Societies should take a public position discouraging their members from harvesting, buying, selling and exhibiting wild plants – particularly mature individuals, and species that are protected, threatened and/or have narrow geographic ranges. Even if wild orchid harvest is already illegal or restricted in a Society's country or region, a Society may still have an influential role in shaping members' understanding, perception and compliance with these rules.

Societies may also encourage or require members who enter plants into exhibitions and competition to state the source of their plants (e.g., to name a greenhouse, producer, or source of a cutting). This can be difficult or impossible to enforce; it might reduce submissions into exhibitions, and some participants may not be honest. Nevertheless, asking participants to provide this information can serve as a reminder to members, and a control to help reduce the exhibition and awarding of illegally sourced plants. Exceptions may be made for well-known specimen plants, usually well-established individuals that are recognisable and pre-date conservation regulations.

1C. Suggested position on social media

Societies should discourage the posting of images of wild-collected plants or plant collecting on their social media channels, especially where these enable sales. Even if this is already done informally, and recognising that it can be difficult to enforce, establishing standards provides clarity and social norms.

2. HOW WE SOURCE OUR PLANTS

The source of plants is key to conservation, and it is important to encourage and support members to select sustainable sources.

2A. Suggested position on sustainable sourcing

Societies should take a public position encouraging members to consider where they are buying their plants from, and encouraging them to source their plants from sustainable sources. In countries where wild-harvested plants are commonly available, Societies should discourage their members from buying those plants.

Societies may further help members, especially new members, understand how and where they can reliably source sustainable, legal plants, such as by:

- Identifying a list of sustainable, legal, green-house grown sources for orchids to help inform members;
- Encouraging members to grow hybrid orchids that do not present a threat to wild populations;
- Promoting plant trading/swaps within the Society;
- Facilitating group purchases from reputable, legal greenhouses domestically and internationally. As it may be difficult to ascertain if a producer is sourcing its plants legally and sustainably, Societies should conduct due diligence and appropriate research into such vendors before making or facilitating group purchases.

2B. Suggested position on harvesting wild plants

Societies should actively discourage their members from harvesting, trading and buying wild-harvested plants. However, in some countries, sustainable harvest of wild plants or their parts may be legal and socially accepted. Where this is the case, Societies should still establish principles and best practices in order to mitigate the negative impacts on species conservation. Societies that accept conditional harvest and ownership of wild plants should consider formalising their best-practices to answer questions such as:

- **Is harvest legal?**
  What are the legal conditions and processes required for harvest or ownership of wild material, if possible at all.
- **Is harvest ethically acceptable?**
  Harvesting wild plants is likely most appropriate when explicitly linked to research and conservation projects. There may also be some contexts where it is acceptable, where it is linked to a structured, managed, sustainable harvest to support propagation efforts to satisfy the hobbyist market and reduce demand for wild plants. It may also be most appropriate where it is linked to the livelihoods of poor rural communities involved in harvest. On the other hand, it may be considered unethical to harvest wild plants for commercial gain or without regard to conservation.
- **Is harvest likely to be sustainable?**
  Harvesting mature individuals from the wild for ornamental trade should be discouraged in almost all contexts. Harvesting species that have known small or threatened populations should also be discouraged. Instead, any harvesting should be limited to seed pods or cuttings – in small numbers and preferably from large populations and common species – for the uses described above. An alternative stock of wild plants may be individuals that are legally relocated from development (e.g, road expansion, deforestation, agricultural sites) and epiphytes that have fallen from trees, where legal.
- **Who should be allowed to harvest?**
  In all cases, if wild harvest is legal, it should likely be managed by the Society or a government agency, rather than undertaken by individual Society members.

3. MAXIMISING THE CONSERVATION VALUE OF PRIVATE COLLECTIONS

Societies should encourage members who own species of conservation importance (whether native or exotic) to maximise the conservation value of their private collection. This is key because many orchid species are not well represented in national or other conservation botanical collections, and Society members' private collections are sometimes larger and more complete than those held by botanical gardens.

Do my orchids have conservation value?

Most plants in private collections are likely to be of limited conservation value, especially if they focus on more common species, plants of unknown origin or plants of uncertain parentage. However, some collectors may have species that are known to be threatened in the wild and/or plants that are known to have been sourced through wild-collection. In such cases, these plants may be of unique, long-term conservation value. However, this value can only be realised if those plants are documented, properly managed and shared.

You can look up the species you own on the IUCN Red List, National Red Lists, or lists of nationally protected wild plants.

3A. Suggested position on propagating wild species

Societies should formally encourage members to participate in propagation of threatened plants that are already within their collections, such as through artificial propagation, cuttings or seed. This can help increase the availability of legal, sustainable plants to other collectors, and potentially reduce demand for wild-harvested plants. This should promote that the source of plants used for propagation is legal, sustainably sourced, and that information about the origin of plants is transparent so that other collectors can be knowledgeable and confident about the sustainability of their plants. Although members who propagate their plants may need to recover some of their costs, such propagation should generally not be encouraged for commercial use.

3B. Suggested position on managing collections that hold plants of conservation value

Societies should actively encourage members who own plants of conservation value to maximise their long-term ex-situ conservation. Many members may not even be aware of the opportunities to enhance the conservation value of their collection. This can include suggestions by the Society for members to:

- Record data about their plants, such as origin, elevation, habitat, and any cultivation information;
- Develop inter-generational plans to ensure collections are not lost when owners can no longer take care of them;
- Share plants (e.g., cuttings) with botanic gardens to ensure they are part of formal ex-situ conservation collections (many gardens accept such donations);
- Share plants (e.g., cuttings) with other growers to ensure reservoir populations;
- Share plants (e.g., cutting, seeds, mature individuals) with conservation institutions;
- Develop long-term, inter-generational management plans for collections, to ensure their long-term care.

3C. Suggested position on sharing plants for conservation

Societies should actively encourage members who own plants of conservation value to share them (cuttings, seeds, mature individuals) with conservation institutions such as botanical gardens. In doing this, it is important that Societies also recognise the sensitivity of related data, both in terms of the risk of enforcement against people who share data, as well as the risk of disseminating locality information to other collectors. As such, any data needs to be made secure, and any requests for data need to be based on strong relationships and trust.

4. PROMOTING CONSERVATION IN OUR SOCIETIES

Although most Societies do not have an explicit focus on conservation, there is still scope to increase engagement and participation among members to benefit the orchid family.

4A. Suggested position on conservation education and activities

Societies should consider including conservation-related activities in their programming, even if it is not the primary objective of their organisation. Although many members may have limited initial interest in conservation, there is an opportunity to strengthen conservation interest, especially among younger members. This may include:

- Identifying speakers with a conservation message;
- Publishing conservation-related articles in newsletters and social media;
- Encouraging members to identify the conservation status of species in shows;
- Identifying local experts and institutions who can provide the Society with technical advice (e.g., on relocations, propagation, evaluators);
- Encouraging members to participate in targeted conservation actions, such as sharing knowledge about locally-threatened species (e.g., species lists, distributions, conservation status), particularly in regions where orchid science remains under-developed and members hold expertise. Importantly, information on species distributions often needs to be treated carefully to avoid facilitating illegal harvest, and is generally best done in cooperation with a scientific institution that can help manage sensitive data, and
- Promoting participation in conservation activities to protect in-situ conservation of wild orchid populations.

Such coordination may be facilitated by establishing a Conservation Officer position within your Society.

4B. Suggested position on relocation

If Society members are involved in relocating plants (e.g., moving them from sites that are being developed), then they should consider establishing a related position and appropriate guidelines. This should act to answer questions such as:

- **Is it legal?**
  Regulations and permitting vary across countries, and can vary between public and private land, and so it is important to help members comply with legal requirements, especially if certain harvesting actions are sanctioned by the Society.
- **What are best practices?**
  When moving orchids between sites, it is important to draw on the latest science to help ensure positive conservation outcomes, and Societies can help inform members of these.
- **Who to contact?**
  When orchids need relocating, who should be contacted, how is this organised, and what formal institutions need to be informed?
- **How can benefits be shared?**
  If members volunteer to participate in relocation, are they allowed to keep some plants for their own collections, and what are the related rules and expectations?
- **Are the plants native to the sites where they are being moved to?**
  Translocations involve the movement of species to sites outside their native range, which can have unintended consequences, such as introducing invasive species and disease. As such it is important to ensure that plants are moved responsibly.

4C. Suggested position on enforcement and sanctions

Although Societies do not have formal powers, they may still establish internal rules for how to respond if members do not comply with Society rules. This can be complicated and sensitive, especially because it is hard to prove/disprove the provenance of plants in a collection, and Societies typically handle infractions informally and privately. However, formalising sanctions for non-compliance, such as warning letters and termination of membership, may be helpful in demonstrating the seriousness of the issue. Societies may consider:

- How should members report concerns?
- What happens if members do not follow the rules?
- What is the process for addressing concerns?

Photo Captions and Credits

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Cover:
Left: *Dendrobium chrysotoxum v suavissimum* - 阿橋花譜 */ KHQ*
Right: *Laelia purpurata* - Malcolm Manners

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Man tends ornamental orchids destined for sale

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Wild orchids in trade in Guangzhou - Stephen Gale

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Paphiopedilum canhii - Phạm văn Thế
Dendrophylax lindenii - Rudy Wilms
Cypripedium calceolus - Björn S.
Constantia cipoensis - Americo Docha Neto
Angraecum longicalcar - JoJan

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Orchid collection in Brazil - Dalton Holland Baptista

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Left: Orchid stall in Kunming, China
Right: *Cattleya dowiana* awarded at a show in Costa Rica - Jacob Phelps

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Sale of orchids at Singapore EXPO - Choo Yut Singh

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Left: "No orchid picking" sign
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Orchid propagation and export facility, Hawaii - Scott Nelson

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Left: Wild orchids for sale in Hong Kong - Stephen Gale
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Telipogon ampliflorus - Jacob Phelps

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Orchid display in Sentosa, Singapore - Choo Yut Singh

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Orchid display in Sentosa, Singapore - Choo Yut Singh

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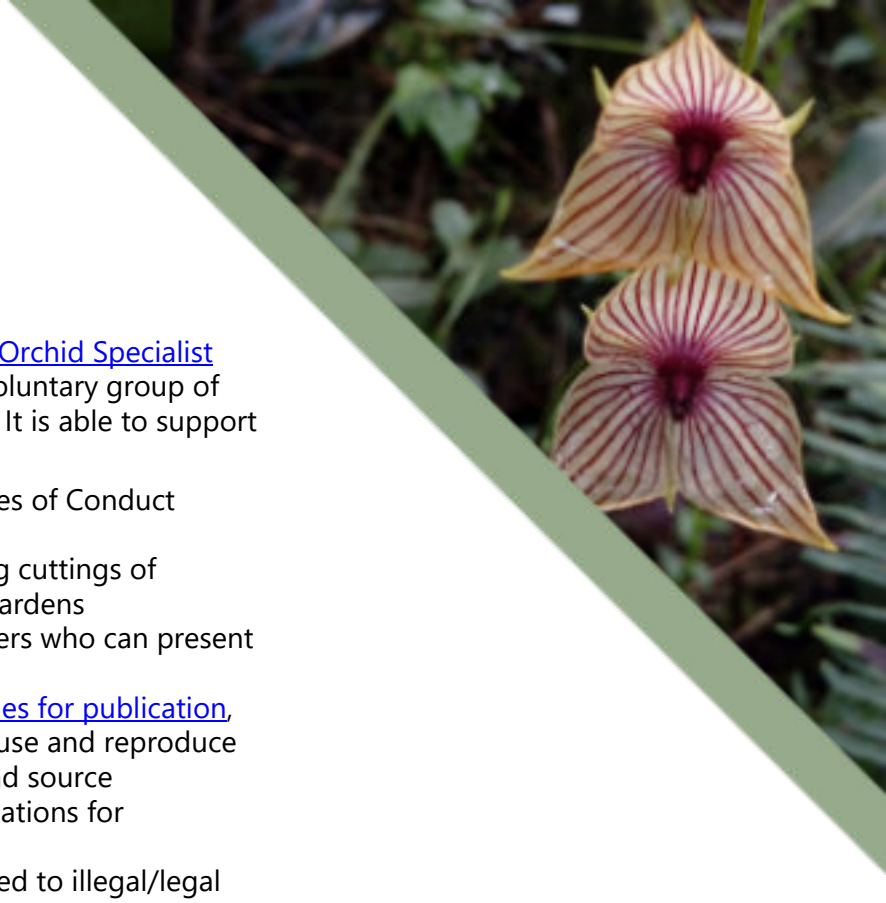
Top: *Telipogon nervosus* - Nicolas Ramirez
Bottom: *Encyclia cordigera* - Jacob Phelps

Graphic design and layout: Lynne Hempton



RESOURCES

Support

The IUCN Species Survival Commission Orchid Specialist Group - Global Trade Programme is a voluntary group of orchid experts and enthusiasts globally. It is able to support Societies to:

- Help review Guidelines and Codes of Conduct based on this resource
- Provide suggestions on donating cuttings of threatened plants to botanical gardens
- Identify free conservation speakers who can present to Societies
- Share conservation-related articles for publication, which Societies are welcome to use and reproduce for free, crediting the authors and source
- Review and support grant applications for conservation-related activities
- Provide technical guidance related to illegal/legal orchid trade

Additional Information

- Hardy Orchid Society Conservation Code and Conservation Policy
- Guidelines on Responsible Translocation of Displaced Organisms and Guidelines for Reintroductions and Other Conservation Translocations provide further information for Societies involved in rescuing and moving orchids that are threatened by development
- Online Red List and Green Status Training can help Society members contribute to the official evaluations of the conservation status for species
- Wild orchids: A framework for identifying and improving sustainable harvest provides a framework for thinking about the sustainability impacts of harvesting wild plants

IUCN SSC Orchid Specialist Group